BAILLY HOMESTEAD
CULTURAL LANDSCAPE AND HISTORIC STRUCTURES REPORT
VOLUME 1 | PART 1

INDIANA DUNES
NATIONAL LAKESHORE
PORTER, INDIANA



MAY 7, 2018
NPS PMIS # 20940



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Cover Image:
Bailly Homestead, Main House and Brick House, View looking Northeast.
(STRATA Architecture 2017)

Bailly Homestead
CULTURAL LANDSCAPE AND HISTORIC STRUCTURES REPORT
Indiana Dunes National Lakeshore

Porter, Indiana

Recommended: _____ Date: _____
Superintendent,
Indiana Dunes National Lakeshore Park

Concurred: _____ Date: _____
Associate Regional Director
Cultural Resources, Midwest Region

Approved: _____ Date: _____
Regional Director, Midwest Region

May 7, 2018

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Table of Contents

Signature Page
Table of Contents i
List of Figures v

VOLUME 1 | PART 1

Chapter 1 | Introduction

Summary 1.1
Location / Description of the Study Area 1.3
Bailly Homestead Significance 1.6
Project Goals 1.6
Report Organization 1.7
Project Team 1.8
Research and Report Methodology 1.9
Common History Errors 1.13
Future Research and Investigation Recommendations 1.14
Acknowledgements 1.15

Chapter 2 | Historical Background and Context

Introduction and Statement of Significance 2.1
Site History to 1822
Landscape 2.5
Early Inhabitants 2.6
European Explorers 2.8
Episode I. The Bailly Homestead, 1822-1918 ..... 2.10
Settlement by Joseph Bailly 1822-1835 ..... 2.14
Occupation by the Bailly Women 1835-1917 ..... 2.18
1918 Landscape Description 2.36
1918 Historic Period Landscape Plan
Episode II. Private Ownership, 1919-1971 ..... 2.41
Sisters of Notre Dame 1919-1937 ..... 2.42
La Roche Family 1937-1965 ..... 2.51
Other Private Owners 1965-1971 ..... 2.60
1971 Landscape Description 2.64
1971 Historic Period Landscape Plan
Episode III. Indiana Dunes National Lakeshore, 1971-2017 ..... 2.67
Early Site Modifications 1971-1977 ..... 2.68
Late Site Modifications 1978-2017 ..... 2.73
Building Chronologies 2.77
Main House Chronology Drawings

Brick House HS-19 Building Chronology…….. ..... 2.91
Two-Story Log House HS-20 Building Chronology …….. ..... 2.97
Storehouse HS-21 Building Chronology …….. ..... 2.104
Chapel HS-22 Building Chronology …….. ..... 2.110
Missing or Unknown Buildings and Structures ……..... 2.121

Chapter 3 | Cultural Landscape Condition and Analysis

Introduction 3.1
Assessment of Landscape Integrity 3.3
Contributing Features 3.5
Landscape Condition and Analysis 3.6
Natural Systems and Features..... 3.6
Spatial Organization and Land Use..... 3.8
Topography 3.9
Views..... 3.10
Vegetation 3.14
Circulation..... 3.18
Buildings and Structures 3.22
Small-scale Features ……. 3.27
Archeological Sites 3.38
Existing Condition Drawings

Chapter 4 | Buildings Existing Conditions and Analysis

Introduction 4.1
Site Utilities 4.11
Drawings
Main House (HS-18)..... 4.17
Drawings
Brick House (HS-19)..... 4.167
Drawings
Two-Story Log House (HS-20) 4.215
Drawings
Storehouse (HS-21)..... 4.235
Drawings
Chapel (HS-22) 4.249
Drawings

VOLUME 2 | PART 2

Chapter 5 | Landscape Treatment Recommendations

Introduction 5.1
Treatment Workshop Summary 5.1
Rehabilitation Treatment Approach for Landscape and Buildings 5.5
Landscape Treatment Plan 5.8
Landscape Treatment Terminology 5.9
Priority Landscape Tasks 5.13
Landscape Treatment Zone 1 ..... 5.15
Landscape Treatment Zone 2 ..... 5.19
Landscape Treatment Zone 3 ..... 5.20
Landscape Treatment Drawings

Chapter 6 | Buildings Treatment Recommendations

Site Utilities 6.1
Drawing
Main House (HS-18) 6.5
Drawings
Accessible Overnight Accommodations Drawing
Brick House (HS-19) 6.29
Drawings
Two-Story Log House (HS-20) 6.41
Drawings
Storehouse (HS-21) 6.49
Drawings
Chapel (HS-22) 6.53
Drawings
Proposed New Universally Accessible Overnight Accommodations 6.61
Drawings

Chapter 7 | Landscape Treatment Implementation Plan

Introduction 7.1
Work Orders 7.2

Bibliography

Appendices

Appendix A – Fireplace Tiles

Appendix B – Historic Numbered Photo Set

Appendix C – Chronology of Known Alterations

Appendix D – 1977 Architectural Drawings

Appendix E – Structural Calculations

Appendix F – Material Analysis - Wood Species Testing

Appendix G – Asbestos and Lead-Based Paint Survey Report

Appendix H – Treatment Alternative Workshop

Appendix I – Landscape Treatment Alternatives

Appendix J – Tree Inventory

Appendix K – Magnitude of Cost Estimates

List of Figures

Chapter 1 | Introduction

1.1. Bailly Homestead, 2017.
1.2. Bailly Homestead in the context of the Indiana Dunes National Lakeshore. The Bailly Homestead is circled in yellow.
1.3. Bailly Homestead, Chellberg Farm, and Little Calumet River Trails. The Bailly Homestead is circled in red.
1.4. Site visit photographs, measuring details and checking the 'level' of the north wall, 2017.
1.5. The Bailly Homestead Landscape Character Areas on 1918 period diagram.

Chapter 2 | Historical Background and Context

2.1. Drawing of the homestead as it may have appeared in the 1840s, view is looking generally south. Drawing reproduced on ceramic tiles.
2.2. List of Baily Homestead Owners 1824-present.
2.3. Bailly Family Tree.
2.4. Current map of Bailly Homestead, with notes about historic features, past and present.
2.5. Bailly Homestead Area in 1830.
2.6. Map of early trails in the region.
2.7. Drawing of Joseph Bailly reading to indigenous people inside his house. Drawing reproduced on ceramic tiles.
2.8. Drawing of the homestead as it may have appeared from the river in the 1840s, view is looking generally northeast. Drawing reproduced on ceramic tiles.
2.9. Drawing of outbuildings at the homestead as they may have looked before Marie Bailly's death in 1866.
2.10. Photograph of Chapel ca. 1890.
2.11. Photograph of HS-20, with the base of the windmill and a shed roof addition on the north side of the building, 1916 and photograph of similar windmill installed at the Bailly Cemetery about the same time period.
2.12. Photograph of the Main House and the Brick House before the Brick House was moved in 1904.
2.13. Photo of Rose Bailly Howe, Frances Howe, and Jennie Wicker, on the west porch of the Main House (HS-18) ca. 1890.
2.14. Photos of the Main House taken before and after the foundation was added compared to a 2017 photograph of the Main House.
2.15. Photographs of Storehouse, before and after early reconstruction and a photograph of the storehouse in 1890.
2.16. Photograph of the Two-Story Log House as it looked in 1916.
2.17. Dining Room mantelpiece, main house, 2017.
2.18. List of construction projects completed by Frances Howe ca. 1896 to ca. 1904.
2.19. Photograph of the Main House taken ca. 1926.
2.20. Photograph of the bridge near the homestead, undated.
2.21. Photograph of the Sauk Trail, ca. 1926.

2.22. Photograph of the front, west wall of the Main House, 1924.
2.23. Photograph of the Chapel ca. 1890, before it was moved and photograph of the Chapel in 1924.
2.24. Interior view of the Chapel ca. 1890 and an interior view of the Chapel ca. 1930.
2.25. Photograph of the Main House taken between 1919 and 1932.
2.26. Photograph of the Two-Story Log House taken between 1919 and 1932.
2.27. Photograph of the Trading Post ca. 1932.
2.28. Photograph of the Wedding Tree, ca. 1932.
2.29. Photograph of the Main House, ca. 1932.
2.30. Photograph of the road in front of the Main House, looking south, ca. 1932.
2.31. Photograph of the La Roche House, summer 1972.
2.32. Photograph of the Chapel included in the 1939 WPA Guide to Indiana.
2.33. Photographs of the Main House and Chapel, 1947.
2.34. 1958 site plan showing the buildings on the homestead and the North Branch of Sauk Trail.
2.35. Photograph of the Main House, laundry house (now demolished) and Brick House, 1958.
2.36. Photograph of the Main House and the Well house (now demolished), 1958.
2.37. Photograph looking north towards the La Roche house and the Storehouse, 1958.
2.38. Photograph of the river, 1958.
2.39. Placemat from the Bailly Homestead Inn restaurant.
2.40. 1968 Map of Homestead.
2.41. Photograph of the homestead taken after the front porch had been infilled for the restaurant use.
2.42. Clipping of a 1972 newspaper article announcing the upcoming restoration of the homestead, 1972.
2.43. Photograph taken June 1972 shows lower front porch enclosed and a solid roof on the conservatory.
2.44. Photograph of the Main House, 1972.
2.45. Photograph of the Chapel interior, ca. 1972.
2.46. Photograph of the Main House under restoration, 1976.
2.47. Photograph of the Main House under restoration, 1976.
2.48. Summary of work completed in 1976.
2.49. Detail from Douglas Walter, Drawing Sheet 3.
2.50. Photograph of the Storehouse, 1984.
2.51. Photographs of the Main House, probably taken soon after repainting.
2.52. View of the homestead from the Little Calumet River, ca. 1958.
2.53. Photograph of the front (west) porch before the major ca. 1900 renovation by Frances Howe.
2.54. Photograph of Homestead Lane, ca. 1890.
2.55. Photograph of the Main House, ca. 1890.
2.56. Photograph of the Main House, ca. 1890.
2.57. Photograph of the Main House taken between 1919 and 1932.
2.58. View of the cast stone steps and east porch of the Main House and the Chapel, 1924.

2.59. Photograph of the cast stone east steps and east porch of the Main House, site walls, landscape, and the Laundry House, 1924.
2.60. Photograph of the Main House with the skylight at the conservatory, ca. 1924.
2.61. Photograph of the Main House showing the lattice infill with the pointed arch silhouettes, 1924.
2.62. View of the south elevation of the Main House, ca. 1935.
2.63. Advertisement for the Bailly Homestead Inn.
2.64. View of the Bailly Homestead, ca. 1960s.
2.65. Image of the Parlor, ca. 1965.
2.66. Photograph of the Main House, ca. 1966.
2.67. Photograph of the Dining Room fireplace, ca. 1970s.
2.68. Photograph of the Main House prior to the NPS 1970s rehabilitation.
2.69. Photograph of the Main House prior to the NPS 1970s rehabilitation.
2.70. Photograph of the Main House prior to the NPS 1970s rehabilitation.
2.71. Photograph of the Main House prior to the NPS 1970s rehabilitation.
2.72. Photograph of the Main House prior to the NPS 1970s rehabilitation.
2.73. Photograph of the Main House, third floor west bedroom, ca. 1970s.
2.74. Photograph of the Main House, third floor bathroom, ca. 1970s.
2.75. Photograph of the Main House, basement, ca. 1970s.
2.76. Photograph of the Main House, basement restroom, ca. 1970s.
2.77. Photograph of the Main House Basement Room 001, ca. 1970s.
2.78. Photograph of the Main House during NPS 1970s rehabilitation.
2.79. Photograph of the Main House during NPS 1970s rehabilitation.
2.80. Photograph of the Main House during NPS 1970s rehabilitation.
2.81. Photograph of the Main House during NPS 1970s rehabilitation.
2.82. Photograph of the Brick House connection to Main House, ca. 1890.
2.83. Photograph of the front (west) porch before the major ca. 1900 renovation by Frances Howe.
2.84. Photograph of the Two-Story Laundry House, ca. 1919-1934.
2.85. Photograph of the Brick House Kitchen 100, ca. 1970s.
2.86. Photograph of the Brick House Bedroom 202, ca. 1970s.
2.87. Photograph of the Brick House Living Room 102, ca. 1970s.
2.88. Photograph of the Brick House front porch and hood, ca. 1970s.
2.89. Photograph of the Brick House, ca. 1972.
2.90. Photograph of the Brick House, ca. 1972.
2.91. Photograph of the Brick House looking east, ca. 1975.
2.92. Photograph of the Brick House looking east, ca. 1975.
2.93. Photograph of the Brick House looking east, ca. 1975.
2.94. Photograph of the Brick House looking east, ca. 1976.
2.95. Photograph Warehouse/Tool Shed, ca. 1890.
2.96. Photograph of the Two-Story Log House, in 1916.
2.97. Photograph of the Two-Story Log House looking northeast, in 1916.
2.98. Photograph of the Two-Story Log House looking south, in 1916.

2.99. Photograph of the Two-Story Log House looking south, in 1924.
2.100. Photograph of the Building behind Two-Story Log House, in 1956.
2.101. Photograph of the Two-Story Log House looking northwest, in 1966.
2.102. Photograph of the Two-Story Log House interior stairs, ca. 1970s.
2.103. Photograph of the Two-Story Log House interior second floor, ca. 1970s.
2.104. Photograph of the Two-Story Log House looking northeast, ca. 1975s.
2.105. Photograph of the Two-Story Log House looking northeast, ca. 1977.
2.106. Photograph of the Storehouse looking west, ca. 1890.
2.107. Photograph of the Storehouse looking northwest, in 1924.
2.108. Photograph of the Storehouse looking southwest, ca. 1950.
2.109. Photograph of the Storehouse looking southwest, ca. 1966.
2.110. Photograph of the Storehouse looking west, in 1972.
2.111. Photograph of the Storehouse interior, in 1972.
2.112. Photograph of the Storehouse foundation, in 1976.
2.113. Photograph of the Storehouse looking west, in 1977.
2.114. Photograph of the Storehouse looking southwest, in 1977.
2.115. Photograph of the Storehouse looking west, in 1977.
2.116. Photograph of the Storehouse looking west, ca.1977.
2.117. Photograph of the Storehouse looking west, in 1984.
2.118. Drawings of original fur trading office.
2.119. Photograph of the Chapel, ca. 1890.
2.120. Photograph of the Chapel interior, ca. 1890.
2.121. Photograph of the Chapel looking east, ca. 1890.
2.122. Photograph of the Chapel belfry, ca. 1890.
2.123. Photograph of the Chapel, ca. 1890.
2.124. Photograph of the Chapel looking north, in 1924.
2.125. Photograph of the Chapel looking east, in 1924.
2.126. Photograph of the Chapel looking southeast, ca. 1919-1934.
2.127. Photograph of the Chapel looking northeast, ca. 1926.
2.128. Photograph of the Chapel interior, ca. 1930.
2.129. Photograph of the Chapel interior, ca. 1930.
2.130. Photograph of the Chapel door, ca. 1947.
2.131. Photograph of the Chapel looking southeast, ca. 1970s.
2.132. Photograph of the Chapel looking east, ca. 1970s.
2.133. Photograph of the Chapel at north walls, ca. 1970s.
2.134. Photograph of the Chapel at east apse wall, ca. 1970s.
2.135. Photograph of the Chapel at log wall juncture, ca. 1975s.
2.136. Photograph of the Chapel at south wall, ca. 1977.
2.137. Photograph of the Chapel looking east, ca. 1984.
2.138. Photograph of the Chapel looking north, October 2010.
2.139. Photograph of the Chapel new footings, November 10, 2010.
2.140. Photograph of the Aerial view to the south of homestead, 1958.
2.141. Photograph of the Aerial view to the southwest of homestead, 1960s.

2.142. Photograph of the Two-Story Log Laundry House looking southwest, ca. 1924.
2.143. Photograph of the Two-Story Log Laundry House and Brick House, ca. 1919-1934.
2.144. Photograph of the Two-Story Log Laundry House and Main House, ca. 1919-1934.
2.145. Photograph of the Main House and Two-Story Log Laundry House, ca. 1947.
2.146. Photograph of the Two-Story Log House and building to the north, ca. 1956.
2.147. Photograph of the Homestead looking northwest, ca. 1958.
2.148. Photograph of the Homestead including Main House, Laundry House, and Brick House, in 1958.
2.149. Photograph of the Homestead including Main House, Laundry House, and Brick House, in 1958.
2.150. Photograph of the Laundry House and Brick House, in 1958.
2.151. Photograph of the structures behind Storehouse, in 1958.
2.152. Photograph of the structures behind Two-Story Log House, in 1958.
2.153. Photograph of the Homestead that have been demolished, ca. 1960s.
2.154. Photograph of the La Roche ranch house, ca 1972.
2.155. Photograph of the Homestead looking south, ca. 1958.
2.156. Photograph of the Spring House.
2.157. Photograph of various outbuildings.
2.158. Photograph of the Homestead, looking south, ca. 1972.
2.159. Photograph of the Well building and kitchen addition to Main House, ca. 1975.
2.160. Photograph of the Outbuilding.
2.161. Photograph of the Garage structure and outbuilding.
2.162. Photograph of the La Roche north house.

Chapter 3 | Cultural Landscape Existing Condition and Analysis

3.1. Photograph of Fishing on the Little Calumet River, in 2017.
3.2. Photograph of the view southwest from the Homestead complex to the bridge, in 2017.
3.3. Photograph of the view southeast from the Main House, in 2017.
3.4. Photograph of the view northwest to Main House from east patio, in 2017.
3.5. Photograph of the view northeast of Entry Drive and Allée from Howe Road, in 2017.
3.6. Photograph of the view southwest along Entry Drive and Allée through site, in 2017.
3.7. Photograph of the view southeast to Main House from Entry Drive, in 2017.
3.8. Photograph of the view northwest to the Storehouse from Entry Drive, in 2017.
3.9. Map of Bailly Homestead Forest Communities, in 2017.
3.10. Photograph of the entry drive at Howe Road. View northeast, in 2017.
3.11. Photograph of the gravel entry drive and remnant allée, in 2017.
3.12. Photograph of the gravel turnaround at the terminus of the entry driveway, in 2017.
3.13. Photograph of the brick sidewalk between entry driveway and Main House, in 2017.
3.14. Photograph of the concrete patio on the east side of the Main House, in 2017.
3.15. Photograph of the concrete sidewalk between Brick House and Main House, in 2017.
3.16. Photograph of the low fieldstone and concrete retaining wall southwest of Brick House, in 2017.

3.17. Photograph of the concrete retaining wall along the west side of the Main House patio, in 2017.
3.18. Photograph of the concrete retaining wall along the north side of the Main House patio, in 2017.
3.19. Photograph of the concrete retaining wall on south side of Main House patio, in 2017.
3.20. Photograph of the poor condition segments of concrete retaining wall on south side of Main House patio, in 2017.
3.21. Photograph of the concrete well cover, in 2017.
3.22. Photograph of one of four wood light poles (typical), in 2017.
3.23. Photograph of the interpretive wayside (typical), in 2017.
3.24. Photograph of the picnic table (typical), in 2017.
3.25. Photograph of the log seating cluster and fire pit in front of Storehouse, in 2017.
3.26. Photograph of the log cluster and in front of Chapel, in 2017.
3.27. Photograph of the wood screen north of the Storehouse, in 2017.
3.28. Photograph of the wayfinding sign to Bailly/Chellberg Farm Contact Station, in 2017.
3.29. Photograph of the damaged wayfinding sign to Bailly Cemetery, in 2017.
3.30. Photograph of the trash receptacle, in 2017.
3.31. Photograph of the National Historic Landmark commemorative stone and plaque inappropriately buried by mulch, in 2017.
3.32. Photograph of the wood bench and trash receptacle, in 2017.
3.33. Photograph of the wire fence remnant embedded in dead ash tree near the Storehouse, in 2017.
3.34. Photograph of the east side of gate to entry drive, immediately north of Howe Road, in 2017.

Chapter4 | Buildings Existing Conditions and Analysis

4.1. Diagram of log corner notching techniques.
4.2. Photograph of log building reconstruction, ca. 1976-7.
4.3. Photograph of electrical utility transformer, 2017.
4.4. Photograph of meter pedestal, 2017.
4.5. Photograph of telephone pedestal, 2017.
4.6. Photograph of gas meter assembly, 2017.
4.7. Photograph of unused sanitary or storm discharge pipe, 2017.
4.8. Photograph of site lighting pole, 2017.
4.9. Photograph of lighting pole fixture, 2017.
4.10. Photograph of light pole junction box, 2017.
4.11. Drawing of existing utility locations, 2017.
4.12. Photograph of the Main House looking northeast, 2017.
4.13. Photograph of fire damaged wall framing in the Main House, 2017.
4.14. Photograph of fire damaged roof framing in the Main House, 2017.
4.15. Photograph of the Main House looking east, 2017.
4.16. Photograph of the Main House looking north, 2017.
4.17. Photograph of the Main House looking west, 2017.

4.18. Photograph of the Main House looking south, 2017.
4.19. Photographs of beaded mortar at the north Main House foundation wall, 2017.
4.20. Photographs of east wall of the Main House east porch, 2017.
4.21. Photograph of the Main House east porch foundation wall, 1924.
4.22. Photograph of the Main House front steps, 2017.
4.23. Photograph of the Main House south chimney rain cap, 2017.
4.24. Photograph of the Main House northwest chimney, 2017.
4.25. Photograph of the Main House northwest chimney interior, 2017.
4.26. Photograph of the Main House parlor wall, 2017.
4.27. Photograph of the Main House Bedroom 201 wall, 2017.
4.28. Photograph of log wall in the Main House Room 304 closet, 2017.
4.29. Photograph of log wall in the Main House Room 304 closet, 2017.
4.30. Photograph of exterior rehabilitation of the Main House conducted by NPS, ca. 1976.
4.31. Photograph of exterior rehabilitation of the Main House conducted by NPS, ca. 1976.
4.32. Photograph of the Main House basement areaway, 2017.
4.33. Photograph of the Main House basement areaway, 2017.
4.34. Photograph of the Main House basement areaway drain, 2017.
4.35. Photograph of the Main House basement areaway, 2017.
4.36. Photograph of the Main House east porch, 2017.
4.37. Photograph of the Main House east porch and stairs, ca. 1924.
4.38. Photograph of the Main House east porch, 2017.
4.39. Photograph of the Main House east porch wall, 2017.
4.40. Photograph of the Main House east porch balustrade, 2017.
4.41. Photograph of the Main House conservatory, 2017.
4.42. Photograph of the Main House east porch, 2017.
4.43. Photograph of the Main House east porch, 2017.
4.44. Photograph of the Main House north wall, 2017.
4.45. Photograph of the Main House south wall, 2017.
4.46. Photograph of the Main House west porch floor, 2017.
4.47. Photograph of the Main House north wall, 2017.
4.48. Photograph of a Main House window, 2017.
4.49. Photograph of a Main House dormer windows, 2017.
4.50. Photograph of a Main House dormer, 2017.
4.51. Photograph of the Main House south windows, 2017.
4.52. Photograph of a Main House window, 2017.
4.53. Photograph of a Main House window, 2017.
4.54. Photograph of a Main House conservatory window, 2017.
4.55. Photograph of the Main House east porch entry door, 2017.
4.56. Photograph of the Main House French doors, 2017.
4.57. Photograph of the Main House roof, 2017.
4.58. Photograph of the Main House roof, 2017.
4.59. Photograph of the Main House conservatory roof, 2017.
4.60. Photograph of the Main House roof and dormer, 2017.

4.61. Photograph of the Main House conservatory roof, 2017.
4.62. Photograph of the Main House conservatory roof, 2017.
4.63. Photograph of the Main House roof, 2017.
4.64. Photograph of a Main House downspout, 2017.
4.65. Photograph of the Main House, ca. 1924.
4.66. Photograph of the Main House basement looking south, 2017.
4.67. Photograph of the Main House basement looking southwest, 2017.
4.68. Photograph of the Main House basement looking northwest, 2017.
4.69. Photograph of the Main House basement looking west, 2017.
4.70. Photograph of the Main House basement looking south, 2017.
4.71. Photograph of the Main House basement looking south, 2017.
4.72. Photograph of the Main House basement looking south, 2017.
4.73. Photograph of the Main House basement fireplace, 2017.
4.74. Photograph of a Main House basement door, 2017.
4.75. Photograph of the Main House basement door to areaway, 2017.
4.76. Photograph of the Main House basement closet door, 2017.
4.77. Photograph of the Main House basement chimney, 2017.
4.78. Photograph of the Main House basement ceiling, 2017.
4.79. Photographs of the Main House dumb waiter remnants, 2017.
4.80. Photographs of the Main House dumb waiter remnants, 2017.
4.81. Drawing of a dumb waiter system, undated.
4.82. Photograph of the Main House basement looking south, 2017.
4.83. Photograph of the Main House basement looking north, 2017.
4.84. Photograph of a Main House basement door, 2017.
4.85. Photograph of the Main House basement looking north, 2017.
4.86. Photograph of the Main House basement looking north, 2017.
4.87. Photograph of the Main House basement looking south, 2017.
4.88. Photograph of the Main House basement looking south, 2017.
4.89. Photograph of the Main House basement looking southwest, 2017.
4.90. Photograph of the Main House basement looking west, 2017.
4.91. Photograph of the Main House basement looking north, 2017.
4.92. Photograph of the Main House basement looking east, 2017.
4.93. Photograph of the Main House basement looking south, 2017.
4.94. Photograph of the Main House basement looking southwest, 2017.
4.95. Photograph of the Main House West Foyer, 2017.
4.96. Photograph of the Main House West Foyer, 2017.
4.97. Photograph of the Main House West Foyer, 2017.
4.98. Photograph of the Main House East Foyer, 2017.
4.99. Photograph of the Main House East Foyer, 2017.
4.100. Photograph of the Main House East Foyer, 2017.
4.101. Photograph of the Main House Parlor looking east, 2017.
4.102. Photograph of the Main House Parlor looking south, 2017.
4.103. Photograph of the Main House Parlor looking southwest, 2017.

4.104. Photograph of the Main House Parlor looking northeast, 2017.
4.105. Photograph of the Main House Parlor looking towards the Conservatory, 2017.
4.106. Photograph of the Main House Conservatory looking south, 2017.
4.107. Photograph of the Main House Conservatory looking northwest, 2017.
4.108. Photograph of the Main House Conservatory looking northeast, 2017.
4.109. Photograph of the Main House Dining Room looking southwest, 2017.
4.110. Photograph of the Main House Dining Room looking west, 2017.
4.111. Photograph of the Main House Dining Room looking southeast, 2017.
4.112. Photograph of the Main House Dining Room looking east, 2017.
4.113. Photograph of the Main House Dining Room ceiling, 2017.
4.114. Photograph of the Main House Dining Room mantelpiece, 2017.
4.115. Photograph of the Main House Dining Room molding and wiring, 2017.
4.116. Photograph of the Main House Dining Room stair, 2017.
4.117. Photograph of the Main House basement stair, 2017.
4.118. Photograph of the Main House basement stair, 2017.
4.119. Photograph of the Main House Dining Room stair, 2017.
4.120. Photograph of the Main House Dining Room stair, 2017.
4.121. Photograph of the Main House Dining Room stair, 2017.
4.122. Photograph of the Main House Dining Room stair, 2017.
4.123. Photograph of the Main House Dining Room closet, 2017.
4.124. Photograph of the Main House Dining Room stair, 2017.
4.125. Photograph of Main House Hall 200 looking north, 2017.
4.126. Photograph of Main House Hall 200 looking south, 2017.
4.127. Photograph of Main House Hall 200 looking west, 2017.
4.128. Photograph of Main House Hall 200, 2017.
4.129. Photograph of Main House Hall 200 looking east, 2017.
4.130. Photograph of Main House Hall 200 stair, 2017.
4.131. Photograph of Main House Hall 200 wall detail, 2017.
4.132. Photograph of Main House Hall 200 floor detail, 2017.
4.133. Photograph of Main House Hall 200 insulator detail, 2017.
4.134. Photograph of Main House Bedroom 201 looking southeast, 2017.
4.135. Photograph of Main House Bedroom 201 looking southeast, 2017.
4.136. Photograph of Main House Bedroom 201 looking south, 2017.
4.137. Photograph of Main House Bedroom 201 looking west, 2017.
4.138. Photograph of Main House Bedroom 201 looking north, 2017.
4.139. Photograph of the Main House Bedroom 201 door, 2017.
4.140. Photograph of the Main House Bedroom 201 window and window detail, 2017.
4.141. Photograph of the Main House Bedroom 201 south windows, 2017.
4.142. Photograph of the Main House Bedroom 201 Nook looking east, 2017.
4.143. Photograph of the Main House Bedroom 201 Nook looking west, 2017.
4.144. Photograph of the Main House Bedroom 201 Nook looking south, 2017.
4.145. Photograph of the Main House Bedroom 201 Nook flooring, 2017.
4.146. Photograph of Main House Bedroom 202 looking west, 2017.

4.147. Photograph of Main House Bedroom 202 looking north, 2017.
4.148. Photograph of Main House Bedroom 202 looking east, 2017.
4.149. Photograph of Main House Bedroom 202 looking south, 2017.
4.150. Photograph of the Main House Bedroom 202 Nook and window looking south, 2017.
4.151. Photograph of the Main House Bedroom 202 Nook looking west, 2017.
4.152. Photograph of the Main House Bedroom 202 Nook looking east, 2017.
4.153. Photograph of Main House Bedroom 202 chimney detail, 2017.
4.154. Photograph of Main House Bedroom 202 flooring, 2017.
4.155. Photograph of Main House Bedroom 203 looking west, 2017.
4.156. Photograph of Main House Bedroom 203 looking north, 2017.
4.157. Photograph of Main House Bedroom 203 looking east, 2017.
4.158. Photograph of Main House Bedroom 203 looking south, 2017.
4.159. Photograph of Main House Bedroom 203 window 202, 2017.
4.160. Photograph of the Main House Bedroom 203 French doors, 2017.
4.161. Photograph of the Main House Bedroom 203 door detail, 2017.
4.162. Photograph of the Main House Bedroom 203 floor grille, 2017.
4.163. Photograph of the Main House Bedroom 203 northeast corner, 2017.
4.164. Photograph of the Main House Bedroom 203 speaking tube, 2017.
4.165. Photograph of Main House Hall 300 looking east, 2017.
4.166. Photograph of Main House Hall 300 stair detail, 2017.
4.167. Photograph of Main House Hall 300 looking west, 2017.
4.168. Photograph of Main House Hall 300 flooring detail, 2017.
4.169. Photograph of the Main House Hall 300 ceiling, 2017.
4.170. Photograph of the Main House Hall 200/Hall 300 stair, 2017.
4.171. Photograph of Main House Room 301 looking south, 2017.
4.172. Photograph of Main House Room 301 looking south, 2017.
4.173. Photograph of Main House Room 301 looking west, 2017.
4.174. Photograph of Main House Room 301 looking north, 2017.
4.175. Photograph of Main House Room 301 looking east, 2017.
4.176. Photograph of Main House Room 301 roof framing, 2017.
4.177. Photograph of Main House Room 301 roof framing, 2017.
4.178. Photograph of Main House Room 301 fire damage, 2017.
4.179. Photograph of Main House Room 302 looking east, 2017.
4.180. Photograph of Main House Room 301, looking west through wall, 2017.
4.181. Photograph of Main House Room 302 looking south, 2017.
4.182. Photograph of Main House Bedroom 303 looking east, 2017.
4.183. Photograph of Main House Bedroom 303 looking south, 2017.
4.184. Photograph of Main House Bedroom 303 looking west, 2017.
4.185. Photograph of Main House Bedroom 303 looking north, 2017.
4.186. Photograph of Main House Bedroom 303 ceiling, 2017.
4.187. Photograph of Main House Bedroom 303 floor grille, 2017.
4.188. Photograph of Main House Bedroom 303 flooring detail, 2017.
4.189. Photograph of Main House Bedroom 304 looking south, 2017.

4.190. Photograph of Main House Bedroom 304 looking west, 2017.
4.191. Photograph of Main House Bedroom 304 looking north, 2017.
4.192. Photograph of Main House Bedroom 304 looking south, 2017.
4.193. Photograph of Main House Bedroom 304 ceiling framing, 2017.
4.194. Photograph of Main House Bedroom 304 floor detail, 2017.
4.195. Photograph of Main House Closet 304A looking north, 2017.
4.196. Photograph of Main House Closet 304A looking west, 2017.
4.197. Photograph of Main House Closet 305 looking north, 2017.
4.198. Photograph of Main House Closet 305 looking east, 2017.
4.199. Photograph of Main House Closet 305 looking north, 2017.
4.200. Photograph of Main House looking northeast, 2017.
4.201. Photograph of Main House looking south, 2017.
4.202. Photograph of Main House basement looking north, 2017.
4.203. Photograph of Main House basement Door 1/002, 2017.
4.204. Photograph of Main House basement fireplace, 2017.
4.205. Photograph of Main House Room 006 floor, 2017.
4.206. Photograph of Main House Room 005 support framing, 2017.
4.207. Photograph of Main House Room 001 support beams, 2017.
4.208. Photograph of Main House Room 001 south chimney, 2017.
4.209. Photograph of Main House Room 101 support framing, 2017.
4.210. Photograph of Main House Room 101 post detail, 2017.
4.211. Photograph of Main House porch framing at Room 003, 2017.
4.212. Photograph of Main House steel decking, 2017.
4.213. Photograph of Main House Room 104 beams, 2017.
4.214. Photograph of Main House Room 104 beam, 2017.
4.215. Photograph of Main House west elevation, 2017.
4.216. Photograph of Main House east elevation, 2017.
4.217. Photograph of Main House Dining Room stair, 2017.
4.218. Photograph of Main House Dining Room stair framing, 2017.
4.219. Photograph of Main House basement stair, 2017.
4.220. Photograph of level measurement at Main House basement stair, 2017.
4.221. Photograph of Main House Room 104 stair framing, 2017.
4.222. Photograph of Main House Room 201 beam, 2017.
4.223. Photograph of Main House Room 200 ceiling, 2017.
4.224. Drawing of Section through floor of Main House Room 305, 2017.
4.225. Photograph of Main House roof looking northeast, 2017.
4.226. Photograph of roof framing in Main House Room 301, 2017.
4.227. Photograph of roof framing in Main House Room 302, 2017.
4.228. Photograph of roof framing at roof ridge, 2017.
4.229. Photograph of roof framing in Main House Room 304, 2017.
4.230. Photograph of roof framing in Main House Room 304A, 2017.
4.231. Photograph of valley rafter in Main House Room 301, 2017.
4.232. Photograph of south valley rafter in Main House looking southwest, 2017.

4.233. Photograph of south valley rather in Main House looking northwest, 2017.
4.234. Photograph of south rafters in Main House Room 303, 2017.
4.235. Photograph of rafter connection in Main House Room 303, 2017.
4.236. Photograph of northwest post of the Main House West Porch, 2017.
4.237. Photograph of Main House Room 101 east wall, 2017.
4.238. Photograph of rotted log at Main House Room 304a, 2017.
4.239. Photograph of rotted framing at Main House Room 302 south window, 2017.
4.240. Photograph of the Main House north elevation second level, 2017.
4.241. Photograph of Main House northeast chimney, 2017.
4.242. Photograph of Main House south chimney, 2017.
4.243. Photograph of the Main House, Existing furnace unit, in 2017.
4.244. Photograph of the Main House, Main ductwork exiting top of furnace, in 2017.
4.245. Photograph of the Main House, Furnace nameplates, in 2017.
4.246. Photograph of the Main House, Furnace nameplates, in 2017.
4.247. Photograph of the Main House, Flue routing from furnace to chimney chase, in 2017.
4.248. Photograph of the Main House, Thermostat for control of furnace, in 2017.
4.249. Photograph of the Main House, Typical supply duct and diffuser in basement, in 2017.
4.250. Photograph of the Main House, Typical supply duct and diffuser in basement, in 2017.
4.251. Photograph of the Main House, Typical supply ductwork to floors above, in 2017.
4.252. Photograph of the Main House, Typical supply ductwork to floors above, in 2017.
4.253. Photograph of the Main House, Typical supply ductwork to floors above, in 2017.
4.254. Photograph of the Main House, Typical supply ductwork to floors above, in 2017.
4.255. Photograph of the Main House, Typical wall mounted supply diffusers on first floor, in 2017.
4.256. Photograph of the Main House, Typical wall mounted supply diffusers on first floor, in 2017.
4.257. Photograph of the Main House, Typical floor mounted supply diffuser on second floor, in 2017.
4.258. Photograph of the Main House, Typical floor and ceiling mounted registers on second and third floor, in 2017.
4.259. Photograph of the Main House, Typical floor and ceiling mounted registers on second and third floor, in 2017.
4.260. Photograph of the Main House, Return ductwork and grille, in 2017.
4.261. Photograph of the Main House, Return ductwork and grille, in 2017.
4.262. Photograph of the Main House, Incoming service entrance feeder, in 2017.
4.263. Photograph of the Main House, Main electrical load center and surge arrestor, in 2017.
4.264. Photograph of the Main House, Main electrical load center and surge arrestor, in 2017.
4.265. Photograph of the Main House, Disconnect serving exterior loads, in 2017.
4.266. Photograph of the Main House, Disconnect serving exterior loads, in 2017.
4.267. Photograph of the Main House, Disconnect serving interior well pump and mixer, in 2017.
4.268. Photograph of the Main House, Examples of duplex receptacle types, in 2017.
4.269. Photograph of the Main House, Examples of duplex receptacle types, in 2017.
4.270. Photograph of the Main House, Typical lamp holders, in 2017.
4.271. Photograph of the Main House, Typical lamp holders, in 2017.
4.272. Photograph of the Main House, Timeswitch, in 2017.

4.273. Photograph of the Main House, Typical light switches, in 2017.
4.274. Photograph of the Main House, Typical light switches, in 2017.
4.275. Photograph of the Main House, Wooden raceway and exposed cloth wiring in Dining Room, in 2017.
4.276. Photograph of the Main House, Wooden raceway and exposed cloth wiring in Dining Room, in 2017.
4.277. Photograph of the Main House, Wooden raceway and exposed cloth wiring in second floor hall, in 2017.
4.278. Photograph of the Main House, Wooden raceway and exposed cloth wiring in second floor hall, in 2017.
4.279. Photograph of the Main House, Lighting protection system air terminals and downleads, in 2017.
4.280. Photograph of the Main House, Lighting protection system air terminals and downleads, in 2017.
4.281. Photograph of the Main House, Lighting protection system downleads, in 2017.
4.282. Photograph of the Main House, Lighting protection system downleads, in 2017.
4.283. Photograph of the Main House, Lighting protection system downleads, in 2017.
4.284. Photograph of the Main House, Ground rod, in 2017.
4.285. Photograph of the Main House, Telephone distribution board, in 2017.
4.286. Photograph of the Main House, Telephone distribution board, in 2017.
4.287. Photograph of the Main House, Main security system panels for all buildings, in 2017.
4.288. Photograph of the Main House, Main security system panels for all buildings, in 2017.
4.289. Photograph of the Main House, Main security system panels for all buildings, in 2017.
4.290. Photograph of the Main House, Main security system panels for all buildings, in 2017.
4.291. Photograph of the Main House, Main security system panels for all buildings, in 2017.
4.292. Photograph of the Main House, Main security system panels for all buildings, in 2017.
4.293. Photograph of the Main House, Security system keypads, in 2017.
4.294. Photograph of the Main House, Security system keypads, in 2017.
4.295. Photograph of the Main House, Typical security system motion detectors, in 2017.
4.296. Photograph of the Main House, Typical security system motion detectors, in 2017.
4.297. Photograph of the Main House, Security system speaker/siren, in 2017.
4.298. Photograph of the Main House, Main sanitary exits in basement, in 2017.
4.299. Photograph of the Main House, Main sanitary exits in basement, in 2017.
4.300. Photograph of the Main House, Sanitary and domestic water piping in the second floor bathroom, in 2017.
4.301. Photograph of the Main House, Sanitary and domestic water piping in the second floor bathroom, in 2017.
4.302. Photograph of the Main House, Gas service pipe to furnace, in 2017.
4.303. Photograph of the Main House, Gas service pipe to furnace, in 2017.
4.304. Photograph of the Main House, Water line from well and in-line pump, in 2017.
4.305. Photograph of the Main House, Storage tank and hose bibbs in basement, in 2017.
4.306. Photograph of the Main House, Typical gutters and downspouts for storm drainage, in 2017.

4.307. Photograph of the Main House, Typical gutters and downspouts for storm drainage, in 2017.
4.308. Photograph of the Main House, Main fire alarm control panels in basement, in 2017.
4.309. Photograph of the Main House, Main fire alarm control panels in basement, in 2017.
4.310. Photograph of the Main House, Fire alarm pull stations, in 2017.
4.311. Photograph of the Main House, Fire alarm pull stations, in 2017.
4.312. Photograph of the Main House, Typical smoke detector, in 2017.
4.313. Photograph of the Main House, Typical fire alarm bell, in 2017.
4.314. Photograph of the Brick House, West and south elevations, in 2017.
4.315. Photograph of the Brick House, South elevation, in 2017.
4.316. Photograph of the Brick House, East elevation, in 2017.
4.317. Photograph of the Brick House, East elevation, in 2017.
4.318. Photograph of the Brick House, East elevation, in 2017.
4.319. Photograph of the Brick House, North elevation. Gas and electric meters were once installed on this elevation and removed during the 1976 rehabilitation, in 2017.
4.320. Photograph of the Brick House, Basement Room 001, in 2017.
4.321. Photograph of the Brick House, Basement Room 001, in 2017.
4.322. Photograph of the Brick House, Basement Room 001, looking up at the historic door arch that has failed, in 2017.
4.323. Photograph of the Brick House, Looking east at the multi-wythe brick wall between Rooms 001 and 002, in 2017.
4.324. Photograph of the Brick House, Room 001, looking northeast towards old window, in 2017.
4.325. Photograph of the Brick House, Room 001, looking east towards Window 004, in 2017.
4.326. Photograph of the Brick House, Room 002, looking north, in 2017.
4.327. Photograph of the Brick House, Room 002, looking north at vent and deteriorated floor joists above, in 2017.
4.328. Photograph of the Brick House, Room 002, looking south, in 2017.
4.329. Photograph of the Brick House, Room 002, looking at lintel above opening into Room 003, in 2017.
4.330. Photograph of the Brick House, Room 003, looking north, in 2017.
4.331. Photograph of the Brick House, Room 003, looking east at infilled window, in 2017.
4.332. Photograph of the Brick House, Room 003, looking at east wall, in 2017.
4.333. Photograph of the Brick House, Room 002, looking south, in 2017.
4.334. Photograph of the Brick House, Kitchen 101, looking east, in 2017.
4.335. Photograph of the Brick House, Kitchen 101, looking south, in 2017.
4.336. Photograph of the Brick House, Kitchen 101, looking west, in 2017.
4.337. Photograph of the Brick House, Kitchen 101, looking north, in 2017.
4.338. Photograph of the Brick House, Kitchen 101, deteriorated floor inside door, in 2017.
4.339. Photograph of the Brick House, Living Room 102, looking south, in 2017.
4.340. Photograph of the Brick House, Living Room 102, looking west, in 2017.
4.341. Photograph of the Brick House, Living Room 102, looking north, in 2017.
4.342. Photograph of the Brick House, Living Room 102, looking east, in 2017.

4.343. Photograph of the Brick House, Living Room 102, detail of the three-wythe brick east exterior wall, in 2017.
4.344. Photograph of the Brick House, Living Room 102, Detail under stairs looking east at the angled line in the plaster on the east wall, in 2017.
4.345. Photograph of the Brick House, Sitting Room 103, looking south, in 2017.
4.346. Photograph of the Brick House, Sitting Room 103, looking west, in 2017.
4.347. Photograph of the Brick House, Sitting Room 103, looking north, in 2017.
4.348. Photograph of the Brick House, Sitting Room 103, looking east, in 2017.
4.349. Photograph of the Brick House, Bedroom 200, looking north, in 2017.
4.350. Photograph of the Brick House, Bedroom 200, looking east, in 2017.
4.351. Photograph of the Brick House, Bedroom 200, looking south, in 2017.
4.352. Photograph of the Brick House, Bedroom 200, looking east, in 2017.
4.353. Photograph of the Brick House, Bedroom 200, Detail stair railing, in 2017.
4.354. Photograph of the Brick House, Bedroom 200, detail at stairs, in 2017.
4.355. Photograph of the Brick House, Bedroom 200, typical window, in 2017.
4.356. Photograph of the Brick House, Bathroom 201, looking west, in 2017.
4.357. Photograph of the Brick House, Bathroom 201, looking north, in 2017.
4.358. Photograph of the Brick House, Room 201, looking east towards the Closet, in 2017.
4.359. Photograph of the Brick House, Closet 201A, looking east, in 2017.
4.360. Photograph of the Brick House, Closet 201A, looking south. Note, the outline of the infilled door can be seen in the paper and plaster, in 2017.
4.361. Photograph of the Brick House, Room 202, looking northeast, in 2017.
4.362. Photograph of the Brick House, Room 202, Hole in east wall, in 2017.
4.363. Photograph of the Brick House, Room 202, looking south, in 2017.
4.364. Photograph of the Brick House, Room 202, looking west, in 2017.
4.365. Photograph of the Brick House, Attic, looking south, in 2017.
4.366. Photograph of the Brick House, Attic, looking south, in 2017.
4.367. Photograph of the Brick House, Attic, Detail of chimney, in 2017.
4.368. Photograph of the Brick House, Attic, Detail of plumbing vent at northwest corner, in 2017.
4.369. Photograph of the Brick House, West elevation, in 2017.
4.370. Photograph of the Brick House, crack monitor in basement, in 2017.
4.371. Photograph of the Brick House, interior basement wall as seen in doorway, in 2017.
4.372. Photograph of the Brick House, joists below house entrance, in 2017.
4.373. Photograph of the Brick House, joist bearing condition in south portion, in 2017.
4.374. Photograph of the Brick House, joists in attic, in 2017.
4.375. Photograph of the Brick House, roof rafters and sheathing, in 2017.
4.376. Photograph of the Brick House, joists in attic, in 2017.
4.377. Photograph of the Brick House, diagonal brick in center wythe, in 2017.
4.378. Photograph of the Brick House, area of bulging on south wall, in 2017.
4.379. Photograph of the Brick House, open joints at southeast corner of house, in 2017.
4.380. Photograph of the Brick House, exterior sealant joint, in 2017.
4.381. Photograph of the Brick House, previously removed baseboard heater, in 2017.
4.382. Photograph of the Brick House, abandoned electrical service entrance, in 2017.

4.383. Photograph of the Brick House, abandoned electrical load center, in 2017.
4.384. Photograph of the Brick House, attached porcelain lamp sockets and conduit, in 2017.
4.385. Photograph of the Brick House, detached porcelain lamp sockets and conduit, in 2017.
4.386. Photograph of the Brick House, light switch and receptacles in basement, in 2017.
4.387. Photograph of the Brick House, light switch and receptacles in basement, in 2017.
4.388. Photograph of the Brick House, existing receptacle back boxes, in 2017.
4.389. Photograph of the Brick House, existing receptacle back boxes, in 2017.
4.390. Photograph of the Brick House, existing devices on first and second floors, in 2017.
4.391. Photograph of the Brick House, existing devices on first and second floors, in 2017.
4.392. Photograph of the Brick House, existing ceiling junction boxes, in 2017.
4.393. Photograph of the Brick House, existing ceiling junction boxes, in 2017.
4.394. Photograph of the Brick House, existing junction boxes and conduit in attic, in 2017.
4.395. Photograph of the Brick House, main sanitary and gas lines to first floor, in 2017.
4.396. Photograph of the Brick House, waste/vent and gas pipes in first floor kitchen chase, in 2017.
4.397. Photograph of the Brick House, waste/vent and gas pipes in first floor kitchen chase, in 2017.
4.398. Photograph of the Brick House, existing bathtub in second floor restroom, in 2017.
4.399. Photograph of the Brick House, existing water closet, in 2017.
4.400. Photograph of the Brick House, lavatory in second floor restroom, in 2017.
4.401. Photograph of the Brick House, water and sanitary lines for bathtub, in 2017.
4.402. Photograph of the Brick House, sanitary vent lines in attic, in 2017.
4.403. Photograph of the Two-Story Log House, North and east elevations, in 2017.
4.404. Photograph of the Two-Story Log House, West elevation, in 2017.
4.405. Photograph of the Two-Story Log House, North elevation, in 2017.
4.406. Photograph of the Two-Story Log House, East elevation, in 2017.
4.407. Photograph of the Two-Story Log House, South elevation, in 2017.
4.408. Photograph of the Two-Story Log House, Roman numeral markings on the exterior of the logs, in 2017.
4.409. Photograph of the Two-Story Log House, First floor, looking east, in 2017.
4.410. Photograph of the Two-Story Log House, First floor, looking south, in 2017.
4.411. Photograph of the Two-Story Log House, First floor, looking west at entry, in 2017.
4.412. Photograph of the Two-Story Log House, First floor, looking north, in 2017.
4.413. Photograph of the Two-Story Log House, First floor, looking east up staircase, in 2017.
4.414. Photograph of the Two-Story Log House, First floor closet under stairs, in 2017.
4.415. Photograph of the Two-Story Log House, Second floor, looking southeast, in 2017.
4.416. Photograph of the Two-Story Log House, Second floor, looking south, in 2017.
4.417. Photograph of the Two-Story Log House, Second floor, looking west, in 2017.
4.418. Photograph of the Two-Story Log House, Second floor bracketed chimney, in 2017.
4.419. Photograph of the Two-Story Log House, Second floor, looking west at roof rafters, in 2017.
4.420. Photograph of the Two-Story Log House, View of deteriorated joint filler material and old insect infestation damage at end grain of logs, in 2017.

4.421. Photograph of the Two-Story Log House, Deteriorated window sashes at south first floor Window 101, in 2017.
4.422. Photograph of the Two-Story Log House, East elevation, in 2017.
4.423. Photograph of the Two-Story Log House, Northeast corner where saddle notches are overcut, in 2017.
4.424. Photograph of the Two-Story Log House, Near west window, second level, in 2017.
4.425. Photograph of the Two-Story Log House, Rotted jamb, east window, in 2017.
4.426. Photograph of the Two-Story Log House, Joist at framing around stairs, in 2017.
4.427. Photograph of the Two-Story Log House, Roof framing, in 2017.
4.428. Photograph of the Two-Story Log House, Chimney from second floor, in 2017.
4.429. Photograph of the Two-Story Log House, Chimney from second floor, in 2017.
4.430. Photograph of the Two-Story Log House, Duplex receptacle mounted to exterior of cabin, in 2017.
4.431. Photograph of the Two-Story Log House, Duplex receptacle mounted to exterior of cabin, in 2017.
4.432. Photograph of the Two-Story Log House, Intrusion detection devices, in 2017.
4.433. Photograph of the Two-Story Log House, Intrusion detection devices, in 2017.
4.434. Photograph of the Storehouse, East elevation, in 2017.
4.435. Photograph of the Storehouse, South elevation, in 2017.
4.436. Photograph of the Storehouse, West elevation, in 2017.
4.437. Photograph of the Storehouse, North elevation, in 2017.
4.438. Photograph of the Storehouse, interior, looking west, in 2017.
4.439. Photograph of the Storehouse, interior, looking east, in 2017.
4.440. Photograph of the Storehouse, Interior of east window sash, in 2017.
4.441. Photograph of the Storehouse, interior of opening in west wall and shutter, in 2017.
4.442. Photograph of the Storehouse, log end grain insect infestation, in 2017.
4.443. Photograph of the Storehouse, deteriorated window sash, in 2017.
4.444. Photograph of the Storehouse, damaged logs, southeast corner, in 2017.
4.445. Photograph of the Storehouse, deteriorated log near entrance, in 2017.
4.446. Photograph of the Storehouse, insect damage on beam, in 2017.
4.447. Photograph of the Storehouse, roof framing, in 2017.
4.448. Photograph of the Storehouse, Telecommunications floor box, in 2017.
4.449. Photograph of the Storehouse, Intrusion detection system devices, in 2017.
4.450. Photograph of the Storehouse, Intrusion detection system devices, in 2017.
4.451. Photograph of the Chapel, North and east elevations, in 2017.
4.452. Photograph of the Chapel, West elevation, in 2017.
4.453. Photograph of the Chapel, South elevation, in 2017.
4.454. Photograph of the Chapel, East elevation, in 2017.
4.455. Photograph of the Chapel, North elevation, in 2017.
4.456. Photograph of the Chapel interior, looking east towards apse, in 2017.
4.457. Photograph of the Chapel interior apse, looking north, in 2017.
4.458. Photograph of the Chapel, Interior apse, looking south, in 2017.
4.459. Photograph of the Chapel, Interior, looking towards south wall, in 2017.

4.460. Photograph of the Chapel, Interior, looking west, in 2017.
4.461. Photograph of the Chapel, Interior, looking north., in 2017.
4.462. Photograph of the Chapel, Interior, roof framing, in 2017.
4.463. Photograph of the Chapel V-notch and saddle notch corner types, in 2017.
4.464. Photograph of the cracked Portland cement based daubing at the Chapel, in 2017.
4.465. Photograph of the Chapel multi-layered Portland cement based daubing, in 2017.
4.466. Photograph of the Chapel deteriorated in-swing window sashes at south elevation, in 2017.
4.467. Photograph of the Chapel apse window frame with missing sash and decorative glazing, in 2017.
4.468. Photograph of the Chapel typical wood framed foundation vents, in 2017.
4.469. Photograph of the Chapel typical wood framed foundation vents, in 2017.
4.470. Photograph of the Chapel east wood framed foundation vent, in 2017.
4.471. Photograph of the Chapel foundation crawl space access on the east elevation is covered with plywood, in 2017.
4.472. Photograph of the Chapel typical deteriorated edge condition of wood roof shingles, in 2017.
4.473. Photograph of the crawl space of Chapel, looking west, in 2017.
4.474. Photograph of the rot on exterior log, south elevation of Chapel, in 2017.
4.475. Photograph of the shingles, east side of apse of Chapel, in 2017.
4.476. Photograph of the roof framing in nave of Chapel, in 2017.
4.477. Photograph of the roof framing in apse of Chapel, in 2017.
4.478. Photograph of Push-button, in 2017.
4.479. Photograph of MC cable, in 2017.

Chapter 5 | Landscape Treatment Recommendations

5.1. Photograph of Treatment Alternatives Workshop at the park, August 2017.
5.2. Map of Bailly Homestead Landscape Treatment Zones, QEA 2017.
5.3. Map of Bailly Homestead Landscape Character Areas on 1918 Period Plan, QEA 2017.
5.4. Map of Priority Landscape Task Locations, QEA 2017.

Chapter 6 | Site and Buildings Treatment Recommendations

6.1. Photograph of the Main House west elevation, 2017.
6.2. Drawing of the Main House Preservation Treatment Zones, 2017.
6.3. Photograph of the Brick House looking southeast, 2017.
6.4. Photograph of the Two-Story Log House west elevation, 2017.
6.5. Photograph of the Storehouse east elevation, 2017.
6.6. Photograph of the Chapel interior, 2017.
6.7. Drawing of site with location of Universally Accessible Overnight Accommodations, 2017.

Chapter 7 | Landscape Treatment Implementation

7.1. Drawing of immediate landscape treatment of site, 2018.
7.2. Drawing of rehabilitation for programmed use of site, 2018.

7.3. Drawing of universally accessible route through site, 2018.
7.4. Drawing of comfort station and picnic area location, 2018.
7.5. Drawing of potential orchard location, 2018.
7.6. Drawing of potential Brick House garden location, 2018.

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Bailly Homestead, view looking southeast. (STRATA 2017)

1 INTRODUCTION

Chapter 1 | Introduction

Summary

The Bailly Homestead is an iconic historic property within the Indiana Dunes National Lakeshore at the southern tip of Lake Michigan near the town of Porter, Indiana. The Bailly Homestead is situated within the western edge of the East Unit of the Indiana Dunes National Lakeshore near the Calumet River. The immediate 2.7-acre homestead site contains five structures including the Main House, Brick House, Two-Story Log House, Storehouse, and Chapel. Together, these buildings represent the historic core of the nineteenth century homestead.

The site is named for its principal founder, Joseph Bailly, a prominent fur trader in the Great Lakes region. Around 1822, Bailly received a license to trade at the Calumet and Little Calumet Rivers in northern Indiana and established a homestead on the Little Calumet River. After the death of Bailly in 1835, his descendants altered the building and landscape through 1917. A series of subsequent owners modified the features of the property until the acquisition by the NPS in 1971. Preservation initiatives since incorporation into the Indiana Dunes National Lakeshore have continued to the present.



Figure 1.1. Bailly Homestead. (QEA 2017)

The Bailly Homestead has significance for its association with the Joseph Bailly Family, a prominent family which was headed by a well-known fur trader in the region, and for the cultural landscape and buildings which retain integrity from the Bailly Family occupation. The period of significance for the Bailly Homestead begins ca. 1822, when Joseph and Marie Bailly established the homestead, and ends in 1918. Their last living granddaughter, Frances Rose Howe, died in 1917, and the property was sold in 1918.

The Bailly Homestead complex, including the cemetery to the north, was designated as a National Historic Landmark in 1962. A National Register Nomination prepared in 1978, lists the Homestead as having state significance tied to its architecture, commerce, and exploration.

The Bailly Homestead Cultural Landscape and Historic Structures Report (CLHSR) is to guide the interpretation, rehabilitation, and maintenance of the Bailly Homestead cultural landscape and buildings. Part 1 of this report provides the history and a record of the existing conditions and past alterations of the immediate Bailly Homestead landscape and buildings through field study, condition assessment, and archival research. Preservation objectives, considerations, and treatment recommendations for the landscape and buildings are presented in Part 2. Archival research conducted for this report focused on the Bailly family and subsequent ownership and their effect on the evolution of the site and buildings. The combination of the cultural landscape and historic structures reports offers the park the opportunity to explore the history and potential treatments for the site in conjunction with the buildings in a single report. The report is intended to provide historical context related to the nineteenth and early twentieth century development and to support future research, rehabilitation, and interpretive efforts for the homestead.

The National Park Service (NPS) currently utilizes the Bailly Homestead to support interpretation of the Bailly Family and early nineteenth century fur trading in northern Indiana. The Main House is open for tours on Sundays and for special events. The Storehouse is used for interpretation. The other three buildings (Brick House, Chapel, and Two-Story Log House) are not currently functional and are interpreted from the exterior only. The NPS trail, which connects the Visitor Contact Station at Chellberg Farm, the Baily Homestead, and the Little Calumet River bisects the homestead site and is heavily trafficked by visitors.[1] An additional trail to the north leads to the Bailly Cemetery and overflow parking across from the Indiana Dunes Environmental Learning Center.

The NPS has selected *Rehabilitation* as the preferred treatment for the site and buildings, which incorporates the preservation and retention of character defining features, while allowing for maintenance, repairs, and much-needed rehabilitation of the buildings and landscape for visitor use. Treatment recommendations were developed in partnership with Indiana Dunes National

[1] The Chellberg Farm is another residential property located within the Indiana Dunes National Lakeshore. That site features the Chellberg House which was built in 1885 and now operates as a house museum. It has no direct historic link to the Bailly Homestead. See “Chellberg Family/House,” U. S. Department of the Interior, National Park Service, Indiana Dunes National Lakeshore. Accessed January 6, 2018, https://www.nps.gov/indu/learn/historyculture/chellberg.htm.

Lakeshore, Indiana Landmarks, the Indiana Division of Historic Preservation and Archaeology (SHPO), and representatives from the NPS Midwest Regional Office during a treatment workshop at the park in August 2017. A specific long-term use for the site and buildings was not determined at the workshop. Several options for use were explored and vetted. The concept of a multi-use venue with overnight accommodations was selected as a goal for the future rehabilitation of the property. This broad definition would allow for many types of use, including an overnight accommodations concept, weddings, retreats, demonstrations, small classes, outdoor events, to support the park's many recreational opportunities, and to provide a variety of educational opportunities for school age students. Most importantly, the site and buildings would be functional for the first time in nearly fifty years, with the ability for visitors to enjoy and explore the Bailly Family legacy.

The selection of this multi-use venue allowed the CLHSR team to develop a rehabilitation plan for future planning and interpretive efforts, including a magnitude of construction costs. The treatment recommendations for the rehabilitation of the site and buildings identify recommendations for the preservation of character defining features and elements, as well as outlining Immediate (Priority) and Long Term maintenance and rehabilitation objectives.

Treatment recommendations for the site include the maintenance of trees and landscape, site access, lighting, identification of recreational opportunities, and the challenges and viable alternatives for delivering new utilities to the site, and for providing accessibility to the Main House, Brick House, and Chapel from a proposed parking area. Treatment for the buildings includes recommendations for the preservation of character defining features and elements while outlining the challenges associated with the individual building rehabilitations.

Location / Description of the Study Area

> *The Indiana Dunes National Lakeshore was established in 1966 to preserve for the educational, inspirational, and recreational use of the public, certain portions of the Indiana Dunes and other areas of scenic, scientific, and historic interest and recreational value in the state of Indiana. About two million annual visitors enjoy the park's 15,000 acres of wetlands, prairies, sand dunes, oak savannas, forests, and historic sites. The park's beach hugs the southern short of Lake Michigan from Gary, Indiana to Michigan City, Indiana.*[2]

The 2.7-acre Bailly Homestead is nestled within the western edge of the East Unit of the Indiana Dunes National Lakeshore near the East Branch Little Calumet River (Figure 1.2). The homestead is located on the Little Calumet River, south and west of Chellberg Farm, and south and east of the Indiana Dunes Environmental Learning Center and historic Good Fellow Club Youth Camp. The Bailly Homestead historically encompassed approximately 2,000 acres. The homestead is in Westchester Township, Porter County, near Chesterton, Indiana. It is located in

[2] Bailly Homestead, Chellberg Farm, and Little Calumet River Trails: Trail Map. US Department of the Interior, Indiana Dunes National Lakeshore, National Park Service.

the SW ¼, SE ¼ S. 27, T 37N, R 6W, and is part of the Indiana Dunes National Lakeshore. The site is accessed by Howe Road, which dead-ends just east of the driveway, where it once intersected Highway 20 (Figure 1.3). This impasse of the road limits the amount of vehicular traffic to the historic site. The homestead is located about 3/4 mile north and west of downtown Porter and approximately two miles south of Lake Michigan.

The site was first developed by Joseph Bailly ca. 1822. The Bailly House and four ancillary buildings are currently located at the Bailly Homestead: Main House (HS-18), Brick House (HS-19), Two-Story Log House (HS-20), Storehouse (HS-21), and Chapel (HS-22). The dates of construction range from 1834 – 1907.



Figure 1.2. Bailly Homestead in the context of the Indiana Dunes National Lakeshore. The Bailly Homestead is circled in yellow. (Trail Map, Indiana Dunes National Lakeshore)

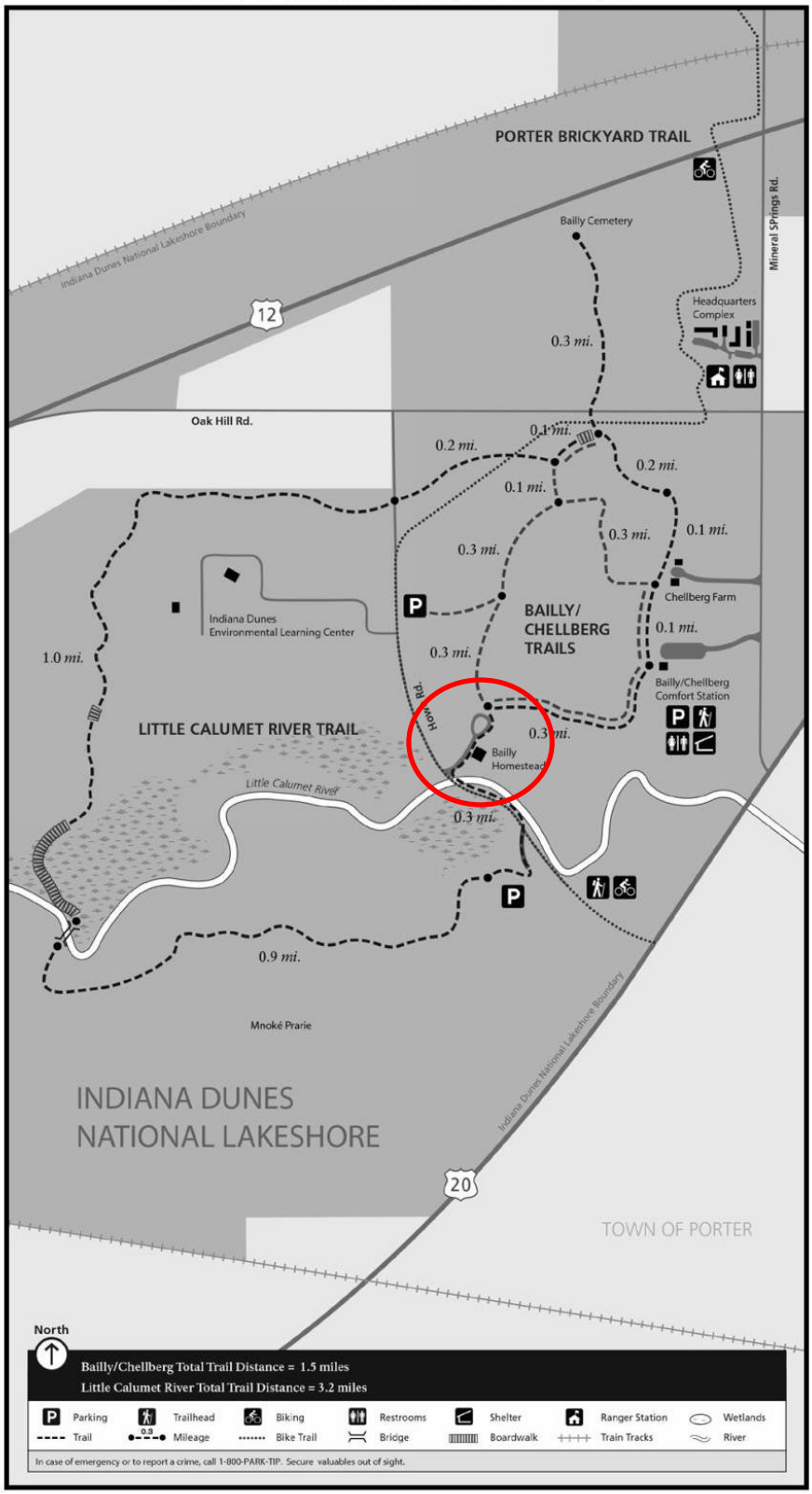


Figure 1.3. Bailly Homestead, Chellberg Farm, and Little Calumet River Trails. The Bailly Homestead is circled in red. (Trail Map, Indiana Dunes National Lakeshore)

Statement of Significance

The Baily Homestead is an iconic historic property in Porter County Indiana. Established by prominent early fur trader, Joseph Bailly and his wife Marie Bailly ca. 1824, it has long been recognized as one of the oldest homesteads in the area. A county history written in 1882 noted that "this interesting locality and the remarkable family which possessed it deserve more than a passing comment," and the Bailly family has held a prominent place in local history ever since.[3] Joseph Bailly was one of the most successful fur traders in the region in the late 1700s and early 1800s, and his business often brought him to what is now northwest Indiana.[4] In the early 1820s, the French-Canadian immigrant chose that area as the site for a new home, and he is often identified as the first Euro-American man to settle in north Indiana.[5] He received a license to trade in the area in 1822, and he and his wife Marie moved to the property with their five children around 1824.[6] The homestead served as the family home and an outpost for the Joseph Bailly's fur trading business in the 1820s and early 1830s. Marie Bailly and their children retained ownership of the property after his death in 1835, and the homestead was occupied by Bailly family members into the early 1900s. Many aspects of the Bailly Homestead resemble the property during the lifetime of Joseph and Marie Bailly's granddaughter, Frances Howe. The homestead continues to provide an important connection to one of the region's most prominent early families.

Project Goals

This CLHSR has several project goals and significant project issues:

- *Document the buildings through measured drawings and photographs.*
- *Determine historic chronology of the site and buildings.*
- *Determine the conditions of each building, including architectural, structural, mechanical, and electrical.*
- *Document the existing landscape (The project area consists of 2.7 acres in the core of the Bailly Homestead NHL which encompasses 45.2 acres within the Indiana Dunes National Lakeshore. The project area is identified on site drawings as "Site Boundary." This area was established in the scope of work at the onset of the project).*
- *Testing buildings for the presence of LBP and lead in soil, as well as potential asbestos containing materials.*
- *Determine character defining features of the site and buildings.*

[3] Weston A. Goodspeed and Charles Blanchard, *Counties of Lake and Porter, Indiana: Historical and Biographical (*Chicago, Illinois: F. A. Battey and Company, 1882), 20.
[4] James R. Sullivan, "Historic Site Survey, The Bailly Homestead, Porter County, Indiana" (U.S. Department of the Interior, National Park Service, Region Five, Philadelphia, PA, April 1958), II.6.
[5] John O. Bowers, *The Old Bailly Homestead*, (1922. No pub. Gary, Indiana, 1922), 1; Sullivan, "Historic Site Survey, The Bailly Homestead, Porter County, Indiana," II.6
[6] A. Berle Clemensen, *Bailly Homestead Unit, Indiana Dunes National Lakeshore, History, Maps, Evaluation of Historic Resources, Determination of Structures Composing the Bailly Homestead* (U. S. Department of the Interior, National Park Service, Indiana Dunes National Lakeshore, Indiana, Nov. 1975), 8; John O. Bowers, *The Old Bailly Homestead* (No pub. Gary, Indiana, 1922), 4.

- *The Park's goal is to rehabilitate the Main House interior and consider rehabilitating the Brick House, Chapel, and Two-Story Log buildings. An associated goal is to provide treatment recommendations for the rehabilitation of the cultural landscape.*
- *Determine a range of use alternatives for the Main House and Outbuildings based upon the feasibility of utility access, building codes, accessibility requirements and interior use program.*
- *Provide treatment recommendations for the rehabilitation of the cultural landscape.*
- *Determine the impacts of treatment alternatives and uses on site and building historic integrity and appearance.*
- *Explore and determine accuracy of a number of histories that have been prepared for the site.*

Report Organization

The Bailly Homestead Cultural Landscape and Historic Structures Report is organized into two parts, followed by appendices. Part 1 includes four chapters. Chapter 1 focuses on the summary of the report, location of the site, statement of significance, outlining project goals, introduction of the project team, research methodology, and recommendations for future research and investigation. Chapter 2 focuses on the presentation of the historical background and context, including an abbreviated timeline, including the site history, three key episodes of development, and site and building chronologies. Chapter 3 includes the cultural landscape integrity assessment, identification of character defining features, landscape condition, and existing condition drawings. Chapter 4 includes the existing conditions analysis, identification of character defining features, and as-built drawings of materials and each of the five buildings.

Part 2 includes discussion of critical issues, preservation treatment recommendations (immediate and long term) and related treatment drawings. Following, is a bibliography and appendices with supporting archival, documentary and relevant project information, hazardous materials report, and magnitude of cost estimates.

Throughout the report, the terms 'original', 'historic' and 'contemporary' are utilized to reference materials. 'Original' refers to materials or features which are thought to have been from the initial construction of the house or outbuildings, or early enough to be indistinguishable from original materials. 'Historic' is used to describe materials or alterations that took place prior to 1918, within the period of significance. 'Contemporary' refers to materials or alterations made within the last fifty years.

Project Team Members

The Cultural Landscape and Historic Structures report team for the Bailly Homestead includes the following:

Project Manager and Preservation Architect
Strata Architecture + Preservation (STRATA), Kansas City, Missouri
STRATA served as the Project Manager and Preservation Architect for the CLHS Report, prepared as-built architectural recordation drawings of the buildings, performed existing conditions analysis, coordinated the Treatment Alternative Workshop and provided treatment recommendations for the immediate and long term repair and rehabilitation of the buildings.

Historic Landscape Architect and Historian
Quinn Evans (QEA), Ann Arbor, Michigan
Quinn Evans Architects provided historic landscape architectural services, as well as the site mapping services for the report. QEA performed existing condition documentation and analysis related to the historic landscape and worked with the park and the team to develop immediate and long term repair treatment recommendations for the site and landscape.

Architectural Historian
Deb Sheals (DS), Columbia, Missouri
Deb Sheals was the Lead Historian, assisted by Andrea Herries. Research for this project focused upon identifying and dating changes to the homestead, and developing a comprehensive timeline of events and alterations. Special emphasis was given to finding and evaluating historic images.

Structural Engineer
Structural Engineering Associates, Inc. (SEA), Kansas City, Missouri
SEA provided structural engineering services related to the existing conditions analysis and provided treatment recommendations for immediate repairs and long term stabilization and rehabilitation of the buildings.

Mechanical, Plumbing and Electrical Engineering (MPE)
Henderson Engineers, Inc. (HEI), Lenexa, Kansas
HEI provided HVAC, plumbing, and electrical engineering services related to the existing conditions analysis and provided sensitive treatment recommendations for the individual buildings.

Cost Estimating
Construction Management Resources (CMR), Mission, Kansas
CMR provided independent Class C cost estimating services for the immediate and long term treatment recommendations for the site and buildings.

Research and Report Methodology

This report is based upon a combination of field study, data analysis and archival research, conducted by a multi-disciplinary project team. The work was guided by Preservation Brief #43: *The Preparation and Use of Historic Structure Reports* and *Historic Structure Reports,*[7] *A Guide to Cultural Landscape reports: Contents, Process, and Techniques*,[8] and *Preservation Plans: A Preparation Guide*.[9] All recommendations included in the report have been developed in compliance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* for cultural landscapes and historic buildings.[10]

On-site study, measuring, photography and assessment of the house, outbuildings, landscape, and relevant site features occurred during June 2017 and August 2017 by various team members. QEA worked with the park to produce topographic mapping for the CLHSR use. Terracon Consultants Inc. from the Naperville, Illinois office visited in June and took samples for testing, including asbestos and lead based paint for the Main House and Brick House. The results are found in Appendix G. Seven slivers of wood samples were taken of original framing members in the Main House and Brick House by the structural engineer for wood species identification, these were processed by Regis Miller, Ph.D., Wood Identification & Information Specialist and are found in Appendix F. A lift was utilized to assess and measure the upper portions of the Main House.



Figure 1.4. Site visit photographs, measuring details and checking the 'level' of the north wall. (STRATA 2017)

[7] Slaton, Deborah, "*Preservation Brief 43: The Preparation and Use of Historic Structure Reports,*" Washington, D.C.: National Park Service, 2005.
[8] Page, Robert, Cathy A. Gilbert, Susan A. Dolan, *A Guide to Cultural Landscape Reports: Contents, Process, and Techniques.* Washington, D.C.: National park Service, 1998.
[9] Dominique M. Hawkins and Lyssa Papazian, *Historic Structure Reports & Preservation Plans; A Preparation Guide* (New Jersey State Historic Preservation office, n.d.).
[10] Charles A. Birnbaum, and Christine Capella Peters, The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes, (Washington, DC: Department of the Interior, National Park Service, 1996); Anne E. Grimmer, The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings, (Washington, DC: Department of the Interior, National Park Service, 2017).

Documentation of the Treatment Alternatives Workshop, held in August 2017 at the park, is found in Appendix H. This workshop explored the future preservation and rehabilitation options for the site and buildings, along with the park and stakeholders in order to determine a direction for further exploration in the Part 2 Treatment Recommendations section of this report.

Frances Howe, granddaughter of Joseph and Marie Bailly, made significant changes to the homestead after she inherited the property in 1891. The majority of those changes took place between 1896 and 1904. Because the changes were made through a number of years, with no clear indication for the chronology or exact years, reference is made for the major renovation projects as ca. 1900, with the understanding there is a significant time period wherein these individual changes may have occurred. If known, the exact dates or years are listed in the Timeline and Building Chronologies sections of this report.

This report references historic and existing landscape of the Bailly Homestead through the lens of landscape character areas (LCAs). LCAs contain similar physical characteristics, qualities, attributes, and associated landscape resources. They enable the comparison of the same location over time. The scope of this report focuses on the domestic landscape and the farm, two of the five LCAs identified for the Bailly Homestead and its context (Figure 1.5).

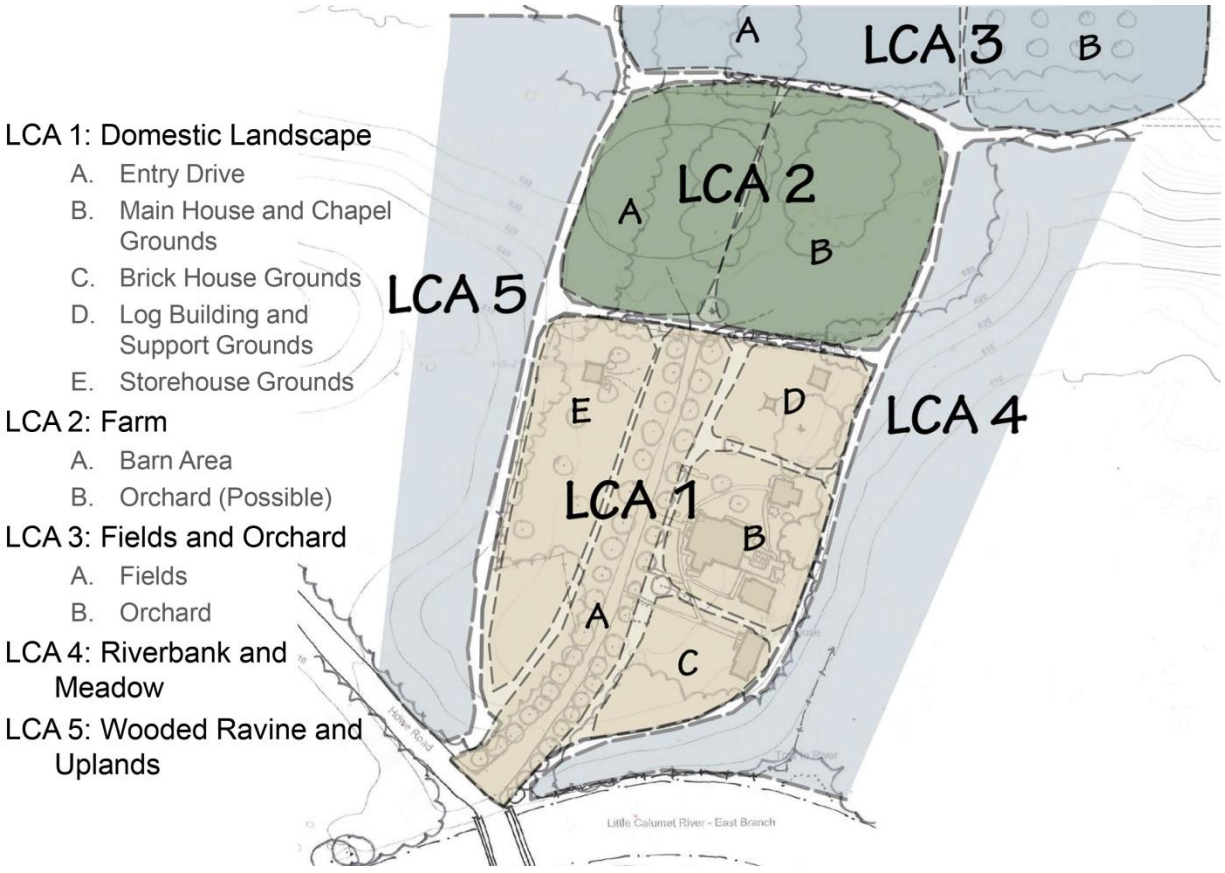


Figure 1.5. The Bailly Homestead Landscape Character Areas on 1918 period diagram. (QEA 2017)

In all, thousands of pages of text and hundreds of maps and photographs have been reviewed for this study. Sources consulted ranged from land survey notes written in the 1830s, to online copies of articles and documents. Research for this project included consultation of primary and secondary materials, in a large number of locations.[11] Primary materials were found in the following Indiana locations, in general order of importance for this study:

- Indiana Dunes National Lakeshore Archives, near Porter
- Westchester Township Historical Museum, Chesterton
- The History Museum, South Bend, Indiana
- Porter County Courthouse, Valparaiso.
- School Sisters of Notre Dame, Mankato, Minnesota.

Secondary sources were also available in several of those locations, plus in the Valparaiso Public Library, Valparaiso and the St. Joseph County Library, in South Bend. Additional information was located through more general sources, as well as online searches, personal interviews, and email conversations. Collections of the Porter County Museum in Valparaiso and the Calumet Center Archives in Gary, Indiana were checked via email and website.

Primary materials consulted include those of the Indiana Dunes National Lakeshore (INDU or National Lakeshore). The Park maintains an electronic catalogue of the National Lakeshore museum collections which can be sorted to identify Bailly-related items. National Lakeshore files include a sizeable set of vertical files on the Bailly Homestead, as well as museum collections, maintenance department records and interpretive department files. The National Lakeshore Museum Collections include a large number of documents and historic photos, including good copies of a set of numbered historic photos that are part of the Porter County Museum Collections (Index B).[12] The Museum also has a set of ceramic fireplace tiles which feature pictorial scenes of the homestead and other locations important to the Bailly Family (Index A).[13] The numbered photos, which were taken ca. 1890, and the tiles, which date to ca. 1900, provide valuable information about the homestead as it looked when it was still in the Bailly family. Park files also include a number of very informative interviews with Margaret Larson, a lifetime area resident who lived on the Bailly Homestead in the early 1900s.

The collections of the Westchester County Historical Museum and the History Museum of South Bend, Indiana were also consulted. The records of the Westchester Township History Museum were of particular value. They include an extensive vertical file and notes from a 2016 exhibit on the Bailly Women, plus a number of high-quality scans of historic postcards of the homestead.

[11] To facilitate any future research, the bibliography of this report includes location information for rare or unusual sources.
[12] "Historic Numbered Photo Set of Bailly Homestead." Set of fifteen black and white prints of various scenes at the Bailly Homestead, with added notes believed to be made by Frances Howe. ca. 1890. Original photos are at the Historical Society of Porter County. Copies of the prints are at Indiana Dunes Museum Collection, Indiana Dunes National Lakeshore.
[13] "Fireplace Tiles," Set of 64 glazed ceramic tiles, ca. 1900, with a typescript of a description by Margaret Larson, Bailly Homestead, Catalogue #s 9658-9678. Indiana Dunes Museum Collection, Indiana Dunes National Lakeshore.

The vertical file includes copies of several important primary and secondary sources, and an index to articles about the Bailly family that were published in the *Chesterton Tribune* in the late 1800s and early 1900s.[14] The vertical file also contains copies of several articles that were published by the Duneland Historical Society in the 1950s, which included firsthand accounts of interactions with the Bailly family. The History Museum of South Bend, Indiana is home to the Bailly Papers of Leva Ritter, a local history enthusiast who researched the Bailly family in the 1950s. Ms. Ritter had plans to write a book about the family but that never come to fruition. Her papers include numerous letters and newspaper clippings about the family and the homestead. Letters in that collection include many between her and Emma Price, who was Frances Howe's adopted daughter. The clippings proved to be a good source of information about the homestead as it appears in the 1950s.

Other records consulted include files of the School Sister of Notre Dame (SSND), who owned the property from 1919-1946, and records of Porter County. SSND records include photographs and papers that date to the time they owned the homestead. County records include deed and assessment records at the Porter County Courthouse, as well as early survey maps and surveyor notes on file at the Engineering office there. Secondary sources included local histories available online or in libraries and the abovementioned vertical files. Online sources include websites for the library of Congress and HABS, Newspapers.com, Ancestry.com., and sites that included historic postcards and maps of Porter County. Finally, a book written by the last member of the Bailly family to own the homestead, *The Story of a French Homestead in the Old Northwest*, by Frances Bailly provided a good deal of information about the working of the homestead.

[14] "*Chesterton Tribune* Articles List, Bailly Homestead," Bailly Vertical File, Westchester Township History Museum and Duneland Historical Society, Chesterton, IN.

Common History Errors

The Bailly Homestead has long been recognized as the home of one of the county's most prominent early families, and there is a rich tradition of oral history that has at times resulted in the frequent repetition of incorrect information. Additionally, many readers took the 1945 novel *Wolves Against the Moon,* a fictional work that was inspired by the Bailly family, to be fact rather than fiction.

Common History Errors – Bailly Homestead

- Joseph Bailly had little to do with the current appearance of the buildings in the homestead. All of the current buildings were constructed or substantially remodeled after his death. The Main House (HS-18) was remodeled to its current appearance long after the deaths of Joseph and Marie Bailly. That work was overseen by their granddaughter, Frances Howe in the 1890s and early 1900s.
- Construction dates for the buildings on the property are often wrong. A frequent error involves construction of the house, which began ca. 1834. It is often stated that the house was built in 1822, the year Joseph Bailly was given a license to trade in the area. He moved his family to the property in 1824, but they occupied other houses for the first decade they were there.
- Joseph Bailly did not live in the Main House for long, and according to his granddaughter Frances Howe, it was not finished during his lifetime. Construction is said to have begun in 1834, and when he died in December 1835, he left instructions for the family to finish the house and layout the surrounding grounds (*French Homestead*, 110).
- Weatherboards on the Main House are often described as a later addition. The house had weatherboards when new. The original weatherboards were replaced during the remodeling project of the 1890s early 1900s, and some of the 1900s weatherboards were replaced during the NPS 1970s restoration work.
- The current mantel in the dining room of the Main House (HS-18) which was added during Frances Howe's lifetime, was not hand carved, as is often reported. It was likely purchased from a millwork company.
- The niches and crucifix in the brick house (HS-19) were not added by the School Sisters of Notre Dame; they were part of the original construction. (See historic photo #7, with notes about the niches that were written by Frances Howe.)
- The existing two-story log building (HS-20) was not a fort or a fur warehouse. Although it looks much like early fur trade buildings, it was added ca. 1900 to serve as a "landscape companion" to the rebuilt chapel, and later served as a Coachman's House. (*French Homestead* and "France Howe as I Knew Her.")
- Joseph and Marie's young son Robert did die at age ten, but he was not stabbed to death—that detail is a fictional part of the novel *Wolves Against the Moon*, but often repeated as fact.

Future Research and Investigation Recommendations

Research and analysis conducted for this CLHSR answered many questions, but also revealed opportunities to learn more about the property. The following list includes potential sources of information, as well as actions that can be taken to protect the buildings from damage and to make known sources more accessible.

- Develop a finding guide(s) for Bailly related items in the National Lakeshore Museum Collections to facilitate future research and interpretation.
- Digitize National Lakeshore photo files that have not been done to date, and develop a labeling and filing system for digital files in general. Try to determine the basis of the filing system that has numbers that begin with H-00.
- Take care to ensure older digital files are archived to minimize chances that they will be deleted.
- Find the photographer and date of the ca. 1890 numbered set of photos. A note in a letter written in the 1950s mentions "the large clear fine views taken by Bodin of Michigan City of all the Homestead scenes," but no photographer by that name was found in historic sources.[15]
- Identify and contact members of the La Roche family to determine if they have any photographs or papers from their period of occupation and ownership (1937-1965). Do the same for the Rork family, who owned the property from 1965-1971.
- Identify local contractors or their family members who worked on the property in the 1960s to see if they have any records. In 1972, NPS historians met with John Pliske, a contractor who had worked on the house for previous owners.
- Identify and contact the family of the late Emma B. Price--formerly Emma Bachman, and Emma Houston. She was Frances Howe's adopted daughter. She corresponded often with Leva Ritter in the 1950s.[16]
- Check the Bailly Files at the Indiana State Library in Indianapolis for information about the homestead.
- Study the variety of differing log construction methods used for buildings of the homestead to determine if they can be linked to the cultural heritage of the builders or specific builders. For example, did the "Swedish carpenter" who rebuilt the chapel and did other work on the homestead favor a specific type of corner notching?
- Evaluate information included in Susan Sleeper Smith's book "Indian Women and French Men," a 2001 publication that was found just after the first draft of this report was completed. That work also cites documents in the "Bailly Family Collections" of the Chicago Historical Society; that collection should be evaluated as well.
- Identify the decision-making process that led to the Homestead being designated as a National Historic Landmark.

[15] Letter from Julia Altrocchi to Leah Horseman, March 17, 1953, Catalogue #3691, INDU Museum Collection.
[16] "Ritter Collection on Joseph Bailly." History Museum, South Bend, IN.

- Further testing is recommended of the plaster and wallboard in both the Main House and the Brick House. While representative testing was conducted of these spaces, the multiple campaigns of plaster and wall repair have made the testing inconclusive as to the exact locations and quantities of asbestos containing materials in the structures. In order to determine a more accurate snapshot of the locations, detailed testing of each wall and ceiling surface in the following locations is recommended: Main House – basement plaster walls; third floor walls and ceilings (including remnants); Brick House – all walls and ceilings.
- Demolition of the contemporary interior ceilings in the Main House (basement, first, and second floors) will allow the inspection of the ends of the existing wood beams that are pocketed into the exterior log walls. These were not able to be inspected during this survey. Note that demolition of some of the contemporary ceilings may need to be conducted by an asbestos abatement contractor.
- Locate the missing stained glass window that was once installed in the east dining room wall to inquire if it might be donated to the park collection. The current owner of the windows previously contacted the park about selling the window, but he did not leave his name or contact information.
- Clean building interiors, as walking on plaster and debris is damaging the wood floors, specifically in the Main House.
- Future analysis of interior finishes, including paint and wallpaper, may yield further interpretive information for the Main House and the Brick House.
- Continue archeological investigation of the site to establish patterns of pedestrian paths or fence post holes.

Acknowledgements

Many thanks to the Indiana Dunes National Lakeshore Staff members, Indiana Landmarks, and the Indiana SHPO who joined our team in August for the Treatment Alternatives Workshop to discuss potential uses for the site and buildings.

National Lakeshore Staff members Judy Collins and Patricia Hodge provided valuable assistance with the park files, and former park staff member Chris Light kindly shared his wide-ranging personal research on the early history of the Bailly family. National Lakeshore civil engineer/GIS coordinator Agustin Perez Maldonado assisted the team with limited topographical survey of the site. Westchester Township History Museum curator Serena Sutliff is very knowledgeable about the Bailly family; she generously shared access to her paper files as well as information about other local sources.

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Photo of Rose Bailly Howe, Frances Howe, and Jennie Wicker, on the west porch of Main House ca. 1890. (INDU Museum Collection)

2 HISTORICAL BACKGROUND AND CONTEXT

Chapter 2 | Historical Background and Context

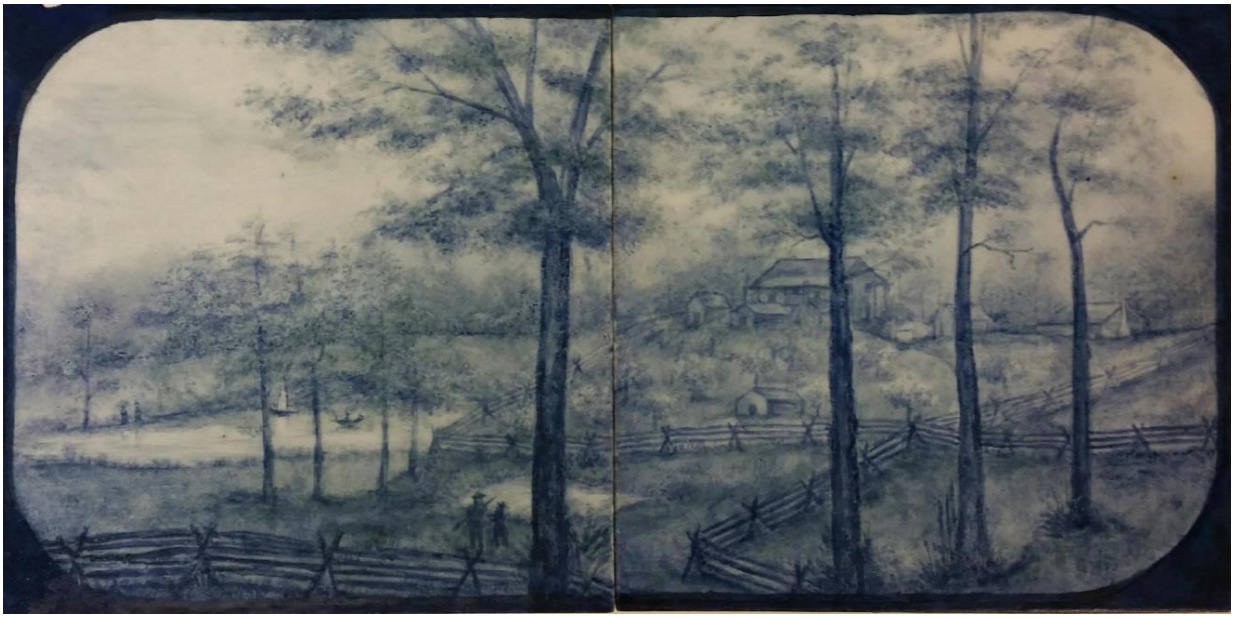


Figure 2.1. Drawing of the homestead as it may have appeared in the 1840s, view is looking generally south. Drawing reproduced on ceramic tiles. They are part of a set of fireplace tiles made for Frances Howe ca. 1900 by the Columbia Encaustic Tile Company, Anderson Indiana.
("Fireplace Tiles 52-53," Catalogue #s 9658-9678, Indiana Dunes Museum Collection, Indiana Dunes National Lakeshore; Appendix A.)

Introduction and Statement of Significance

The Baily Homestead is an iconic historic property in Porter County Indiana. Established by Joseph and Marie Bailly ca. 1824, it has long been recognized as one of the oldest homesteads in the area. A county history written in 1882 noted that "this interesting locality and the remarkable family which possessed it deserve more than a passing comment," and the Bailly family has held a prominent place in local history ever since.[17] Joseph Bailly was a successful, independent fur trader who is often identified as one of the first Euro-American men to settle in northwest Indiana. He received a license to trade in the area in 1822, and he and his wife Marie moved to the homestead with their five children around 1824.[18] The homestead served as the family home and an outpost for the Joseph Bailly's fur trading business in the 1820s and early 1830s. Marie Bailly and their children remained after his death in 1835, and the property was occupied by Bailly family members into the early 1900s. The arrangement of the buildings along

[17] Weston A. Goodspeed and Charles Blanchard, *Counties of Lake and Porter, Indiana: Historical and Biographical (*Chicago, Illinois: F. A. Battey and Company, 1882), 20.
[18] A. Berle Clemensen, *Bailly Homestead Unit, Indiana Dunes National Lakeshore, History, Maps, Evaluation of Historic Resources, Determination of Structures Composing the Bailly Homestead* (U. S. Department of the Interior, National Park Service, Indiana Dunes National Lakeshore, Indiana, Nov. 1975), 8; John O. Bowers, *The Old Bailly Homestead* (No pub. Gary, Indiana, 1922), 4.

the entry drive and their relationship to the river currently reflect the Bailly Homestead during the lifetime of Joseph and Marie Bailly's granddaughter, Frances Howe. Although much of the original historic fabric of the buildings, vegetation, and small-scale features related to the site during Joseph Bailly's lifetime are absent from the landscape today, the Bailly Homestead provides an important connection to one of the region's most prominent early families.

The homestead is in Westchester Township, Porter County, near Chesterton, Indiana. It is located in the SW ¼, SE ¼ S. 27, T 37N, R 6W, and is part of the Indiana Dunes National Lakeshore. It includes five buildings, four of which are of log construction. The fifth is of brick. Most of the buildings saw substantial modifications while they were occupied by Bailly family members. All buildings were restored to their early twentieth-century appearance in 1977.[19] The 1977 restoration/reconstruction project involved substantial replacement of historic fabric.

- **Main House (HS-18).** A large hewn log house with weatherboards that was built in 1834-1835. A major remodeling project that took place from ca. 1896 to ca. 1903 added late Victorian/ Eastlake style elements.

- **Brick House (HS-19).** A two-story brick house that was built just east of the main house ca. 1875 to serve as a kitchen and studio for Rose Bailly Howe, Joseph and Marie Bailly's daughter. It was moved to its current site in 1904 and enlarged in 1908.

- **Two-Story Log House/Coachman's House (HS-20).** A small two-story log building that was built ca. 1900 to serve as what Frances Howe called a "landscape companion" to the Chapel (HS-22, below).[20] It was built with logs salvaged from two older buildings. The construction date of this building is the least well-documented of the group, but it is believed to have been built after 1890, since it was not included in a set of photos of the property that were taken ca. 1890. It was definitely in place by 1904, when it was described as a Coachman's House by C.W. Nelson.

- **Storehouse (HS-21).** This small one-story story log building was built for Joseph Bailly before his death in 1835. It was rebuilt to its current configuration between 1890 and 1907.[21]

- **Chapel (HS-22).** This was originally a two-story log building constructed in the 1820s or 30s. It was transformed into a one-story log chapel shortly after the death of Marie Bailly in 1869. Around 1900, the building was moved several yards to the north and a large external fireplace was replaced with an apse.

[19] See the following timelines for more information and specific citations.
[20] Frances R. Howe, *The Story of a French Homestead in the Old Northwest* (Columbus, OH: Press of Nitsschke Bros., 1907), 165, accessed May 17, 2017, https://books.google.com.
[21] Howe, *The Story of a French Homestead,* 164.

The history of the homestead encompasses three major periods of development:

- **Episode I: 1822-1918.** This period corresponds to the time the Bailly family owned and occupied the homestead. In 1822, Joseph and Marie Bailly moved into a small log house on the riverbank with their children, and the property remained in their family until the death of their last granddaughter, Frances Howe. Frances Howe died late in 1917, and the homestead was sold to the School Sisters of Notre Dame in 1919. The drawing Historic Period Plan: 1918 Landscape presents the Bailly Homestead cultural landscape at the end of the Period of Significance.

- **Episode II: 1919-1971.** The property was privately owned throughout that episode. Those owners included the School Sisters of Notre Dame, Joseph S. and Alma La Roche, and Joseph E. and Effie M. Rork. The drawing Historic Period Plan: 1971 Landscape illustrates the landscape of the Bailly Homestead immediately prior to transition to National Park Service ownership.

- **Episode III: 1971-2017.** The time the homestead has been under the care of the National Park Service. It began with National Park Service acquisition of the property in 1971 and continues to the present day, 2017.

This chapter has been written to provide quick reference to the long history of the property. It features short a summary of each episode, as well as an illustrated timeline of events associated with the property. Within the summaries, footnotes are included only for direct quotes or information not included in the timeline.

Bailly Homestead
Chain of Ownership

Episode I:

1822 Joseph Bailly settled the land, and later acquired U. S. patents for this parcel and many others in the area.

1869 Joseph and Marie Bailly's oldest living daughter, Rose Bailly Howe, becomes owner after numerous settlements among heirs of Joseph Bailly.

1891 Rose Bailly Howe dies and leaves the land to her oldest living daughter, Frances Howe.

1917 Frances Howe dies, leaving only one heir, an adopted daughter, Emma Bachman Huston, who was living in California.

Episode II:

1919 The property is sold to the School Sisters of Notre Dame.

1946 School Sisters of Notre Dame sell the property to Joseph S. and Alma La Roche, who had been living there since the 1930s.

1965 La Roches sell to Joseph E. and Effie M. Rork.

Episode III:

1971 Bailly homestead property purchased by National Park Service, as a landholding within the Indiana Dunes National Lakeshore.

Figure 2.2. List of Baily Homestead Owners 1824-present. (Compiled by Deb Sheals, 2017.)

Site History to 1822

Landscape Setting

Located along the southern shores of Lake Michigan in the northwestern region of Indiana, Porter County covers 420 square miles, and has a topography formed from glacial drift which covered expansive areas of the northern hemisphere during the Wisconsin Stage of the Pleistocene Era.[22] When the ice retreated from a region that covers parts of current day Indiana, Wisconsin and Illinois, the geological debris left by the advance of the glaciers formed a terminal moraine known as the Valparaiso Moraine. The wide strip of land created from those accumulated rocks and sediment at the end of the moraine intersected Porter County in an east–west direction.[23] Water that ran down from that high region, coupled with freezing and thawing patterns, and rising and receding lake water levels shaped rivers, smaller lakes, sand ridges and expansive marsh in the area.[24] Those environmental conditions created the Kankakee basin and Kankakee River to the south of the central high terrain, and to the north, the Calumet region and the Calumet River.[25]

Between the Calumet and Lake Michigan to the north is the Little Calumet River, where the Bailly Homestead is located. The river runs parallel to the shore of Lake Michigan, and is separated from that large body of water by marshland and sand dunes. Sand and silt that was deposited from advancing and receding waters of Lake Michigan and Lake Chicago (another large body of water that had formed near current day Chicago following glacial retreat) contributed to the expansive dune area of the region.[26] Ridgetops, interdunal ponds, marshes, and wetlands characterize the landscape setting of the Bailly Homestead.[27]

The native flora of the general dune area includes tall grasses and low brush, intermixed with mixed forest patches of hardwood forest types.[28] The inland forests around the Bailly Homestead likely consisted of oak-hickory communities in the upland areas and mixed deciduous hardwood swamps in the bottomlands.[29] Instances of other forest types including

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[22] Harry G. Cutler, *History of Porter County, Indiana,* vol. 1 (Chicago: The Lewis Publishing Company, 1912), 1; Anthony Fleming, “Ice Age in Indiana,” *Indiana Geological Survey*, accessed Aug. 22, 2017, https://igs.indiana.edu/Surficial/IceAge.cfm.
[23] Cutler, *History of Porter County, Indiana,* vol. 1, 1-2, 6.
[24] V. Fredrick Limp, “The Bailly Site: An Archaeological Study of an Early Historic Homestead in the Calumet,” 1974, National Park Service, Bailly Homestead, Indiana Dunes National Lakeshore Park Archives, Porter, IN, 2-4.
[25] Cutler, *History of Porter County, Indiana,* vol. 1, 1-2, 6.
[26] Cutler, *History of Porter County, Indiana,* vol. 1, 8.
[27] Dawn Bringelson and Jay T. Sturdevant, *An Archeological Overview and Assessment of Indiana Dunes National Lakeshore, Indiana (*Lincoln, Nebraska: Midwest Archeological Center Technical Report No. 97. National Park Service, Midwest Archeological Center, 2007), 7-8.
[28] Cutler, *History of Porter County, Indiana,* vol. 1, 8-9; Limp, “The Bailly Site: An Archaeological Study,” 1974, 1-8.
[29] Dennis A. Albert and Patrick J. Comer, Atlas of Early Michigan’s Forests, Grasslands, and Wetlands: an Interpretation of the General Land Office Surveys 1816-1856, Lansing: Michigan State University Press, 2008; Kevin Hop, Sara Lubinski, and Jennifer Dieck, USGS, and Jim Drak and Shannon Menard, NatureServe, National Park Service Vegetation Inventory Program, Indiana Dunes National Lakeshore,

mixed oak and other wetlands likely existed in the vicinity. The stabilized glacial clay soils of the Bailly Homestead also support a Beech-Maple forest type that is relatively rare along the southern lakeshore.[30] To the south of the dunes, marshlands have historically supported cranberry (*Vaccinuim macrocarpon*) and huckleberry (*Gaylussacia baccata*), with a wide variety of wild fruit and nut trees that grew along sand ridges.[31] Relationships between early plant records and geomorphology at the dunes suggests that human occupation of the area influenced the distribution of plants in the area of the Bailly Homestead and throughout the National Lakeshore.

Early Inhabitants

The earliest inhabitants of the region pertain to four traditions: Paleoindian, Archaic, Woodland, and Upper Mississippian.[32] Documentation indicates human settlement as early as 12,000 BC. The Bailly Homestead and Chellberg Farm areas are the only areas within the National Lakeshore where evidence of Paleoindian hunter-gatherers have been found to date.[33] Environmental changes shifted floral and faunal distributions including that of human occupation of the dunes beginning about 8,800. This led to longer periods of sedentism and other cultural changes associated with the Archaic Tradition through 1000 BC. Beginning around 1000 BC, the Woodland Tradition began to emerge with identifying characteristics including constructed burial mounds, limited horticulture, thick-walled pottery, and the diversification of plant use for subsistence. Archaeological investigations at the Bailly Homestead have excavated artifacts from the Archaic through Middle Woodland periods.[34] In Porter County, mounds were identified near Wolf Creek in the Kankakee basin, among the heavily forested landscape of the middle and southern sections of the county.[35] In the Calumet region, where marsh and dunes dominate the landscape, permanent settlements by indigenous people were limited.[36] The early settlement of the Lakeshore is documented by numerous studies to date.[37]

Indiana (La Crosse, Wisconsin: US Department of the Interior, US Geological Survey, Upper Midwest Environmental Sciences Center, 2009).

[30] Bringelson and Sturdevant, *An Archeological Overview*, 10-14.

[31] Cutler, *History of Porter County, Indiana,* vol. 1, 16.

[32] Bringelson and Sturdevant, *An Archeological Overview*, 19-43.

[33] Bringelson and Sturdevant, *An Archeological Overview*, 22.

[34] Mark R. Schurr and Joshua J. Wells, “Geophysical Surveys and Excavations at the Bailly Homestead Site, Indiana Dunes National Lakeshore,” MWAC, NPS, April 3, 2014; Limp, “The Bailly Site: An Archaeological Study,” 1974.

[35] Cutler, *History of Porter County, Indiana,* vol. 1, 20-21. This information was recorded in an 1834 United States land survey.

[36] Sarah Gibbard Cook and Robert S. Jackson, *The Bailly Area of Porter County, Indiana,* Geo-historical study for Indiana Dunes National Lakeshore Porter, IN (Evanston: Robert Jackson & Associates, 1978); Limp, “The Bailly Site: An Archaeological Study,” 1974, 35.

[37] Bringelson and Sturdevant, “An Archeological Overview,” 19-34; Falkner, Charles H., “The Late Prehistoric Occupation of Northwestern Indiana: A Study of the Upper Mississippi Cultures of the Kankakee Valley,” Prehistory Research Series Vol. 5, No. 1, Indian Historical Society, Indianapolis, 1974; Markman, Charles W., “Chicago Before History: The Prehistoric Archaeology of a Modern Metropolitan Area,” Studies in Illinois Archaeology 7, Illinois Historic Preservation Agency, Springfield, 1991; and, Brown, James A. and Patricia O’Brien, “At the Edge of Prehistory: Huber Phase Archaeology in the

As recorded by French Jesuit explorers who first traversed the area between 1671 and 1675, these groups of people included the Puans (Winnebago), Illinois, Potawatomi, Sauk, and the Ottawa.[38] The Ottawa, also known as Odawa, were described by one author as having been "so important in the French fur trade, that before 1670, it was common practice in Quebec to call any Algonquin from the Great Lakes an Ottawa."[39] Ottawa villages were concentrated in Mackinac (upper Michigan) throughout the 1600s, after which many members of the tribe began moving south.

The Miami, who may have formed the majority of the American Indians encountered by the earliest French expeditions, were also present in what is now northern Indiana, and were at one time part of a single nation with the Potawatomi.[40] By the 1770s, Miami groups moved south toward the Wabash and Maumee Rivers and the Potawatomi became the dominant group to reside in the area now outlined as Porter County.[41] As European governments encroached on the area, the Potawatomi became engaged with territorial fights and political wars that ensued in the 1700s and 1800s, including the French and Indian War (1755-1763). Loyal to the French until the end of that conflict in 1763, they then became allies of the British and remained so through the Revolutionary War.[42] Beginning in the first years of the nineteenth century, the Potawatomi Nation entered into multiple peace negotiations with the United States government and by 1832 they had ceded all of the land they once occupied in the Porter County area.[43]

During the time that the American Indians used the land around the southern tip of Lake Michigan, they established trails, many of which traversed Porter County. Larger trails in the area included the Sauk Trail, the Calumet Beach Trail, and the Lake Shore Trail.[44] The latter two trails ran parallel to Lake Michigan, following ridges and beaches which were easier to travel along than the thick marshes and soft dunes.[45] The Bailly Homestead was located near the crossing of the Calumet Beach Trail and the Northern Branch of the Sauk Trail, which led to another significant trail known as the Dakota-Wisconsin Trail.[46] Authors, Cutler, Cook and Limp describe the ancient trails in more detail in their respective writings and all note that the French and English trappers, military troops, and later the railroads, often used these routes to traverse the land.[47]

Chicago Area," Illinois Department of Transportation, Center for American Archeology, Kampsville, Illinois, 1990.

[38] Clemensen, *Historic Resource Study Indiana Dunes*, 1979, 2; Cutler, *History of Porter County, Indiana,* vol. 1, 23, 30-31.

[39] Lee Sultzman, "Ottawa History, Accessed January 27, 2018. http://www.tolatsga.org/otta.html.

[40] Limp, "The Bailly Site: An Archaeological Study," 1974, 7-9.

[41] Cutler, *History of Porter County, Indiana,* vol. 1, 22-26; Clemensen, *Historic Resource Study Indiana Dunes*, 1979, 1; Limp "The Bailly Site: An Archaeological Study," 1974, 9.

[42] Cutler, *History of Porter County, Indiana,* vol. 1, 24.

[43] Cutler, *History of Porter County, Indiana,* vol. 1, 25-27.

[44] Limp, "The Bailly Site: An Archaeological Study," 1974, 14 and map B.

[45] Clemensen, *Historic Resource Study Indiana Dunes*, 1979, 4.

[46] Limp, "The Bailly Site: An Archaeological Study," 1974, 14 and map B.

[47] Cutler, *History of Porter County, Indiana,* vol. 1, 27; Cook and Jackson, *The Bailly Area of Porter County, Indiana,* Fig 4 and 12-33; Limp, "The Bailly Site: An Archaeological Study," 1974, 14.

European Explorers

French explorers began expeditions through the southern regions of the Great Lakes in the second half of the 1600s, and traveled mostly by waterways. In 1672, two Catholic missionaries named Father Allouez and Father Dablon traversed the country from the shores of Lake Michigan to the Kankakee River.[48] In the early 1680s, Sieur de la Salle, who is known for claiming the Louisiana Territory for the French, also traveled through the region, including rivers of Porter County.[49] Trappers and hunters came to the area to collect the pelts of beaver, muskrat, otter and mink, along with raccoons, opossums and squirrels, all of which were plentiful in the Great Lakes area and were in high demand on the European market.[50] Although most of the region was sparsely populated by trappers of French-Canadian origin, other European explorers were also attracted to the area. Intermarriage between American Indians and explorers and traders was common during this period of time.

Struggle between the French, British, and Spanish for claim to the land around the Great Lakes began in the mid-1600s. English settlers began arriving in the area known as New France in the 1600s, and the French responded by attempting to drive the English out. The French also forbade Native American tribes from trading with the English. The English discounted the French warnings, telling the tribes that the land belonged to the English, and also threatened the tribes with attacks if they continued to trade with the French. By 1755, the conflict led to the French and Indian War. Native Americans fought on both sides, though a majority fought on the side of the French.[51] The English gradually gained the advantage, and by 1760, they controlled land around the Great lakes as well as Quebec and Montreal, ending fighting in North America. The war continued in Europe and India after that, but finally concluded with France and England signing the Treaty of Paris in 1783. That treaty allocated parts of Canada and other French land east of the Mississippi River, including what is now Indiana, to England.[52] Members of the Pottawatomi tribe in the Bailly Homestead area responded to the change in power by strengthening earlier relationships with the British, most of which were based upon the fur trade.[53]

Subsequent British restrictions on new settlement in the area between the existing Colonies and the Mississippi River exacerbated tensions between England and the Colonies, and contributed to the American Revolution.[54] Following the Revolutionary War, the Indiana Territory was established in 1800, and by 1803 the United States Government had established its authority in the region by building Fort Dearborn at the mouth of the Chicago River.[55] Led by Colonel John H. Whistler, the troops that built Fort Dearborn traveled to the area by boat and land, passing

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[48] Cutler, *History of Porter County, Indiana,* vol. 1, 30.
[49] Cutler, *History of Porter County, Indiana,* vol. 1, 31.
[50] Bowers, *The Old Bailly Homestead*, 2.
[51] Randall Schaetzl, "The French and Indian War," accessed Jan. 20, 2018, http://geo.mus.edu/estra/geomich/frenchindian_war.html.
[52] Cutler, *History of Porter County, Indiana,* vol. 1, 32.
[53] Bringelson and Sturdevant, *An Archeological Overview*, 52.
[54] The History Museum, "Early History of Indiana to 1779," accessed Jan. 20, 2018, http://historymuseumsb.org/early-history-of-indiana-to-1779.
[55] Cutler, *History of Porter County, Indiana,* vol. 1, 32.

along parts of the Sauk and Beach Trails in Porter County.[56] According to a 1912 Porter County history, the fort "became the headquarters of the fur traders operating around the head of the lake, and wielded considerable influence over the American Indian inhabitants of Porter County. Trappers and hunters increased in numbers along the Calumet and Kankakee Rivers."[57] Indiana became a state in 1816, prior to Joseph Bailly's arrival to the area.

[56] Cutler, *History of Porter County, Indiana,* vol. 1, 32; Limp, "The Bailly Site: An Archaeological Study," 1974, 14.
[57] Cutler, *History of Porter County, Indiana,* vol. 1, 32.

Episode I. Bailly Family Occupation 1822-1918.

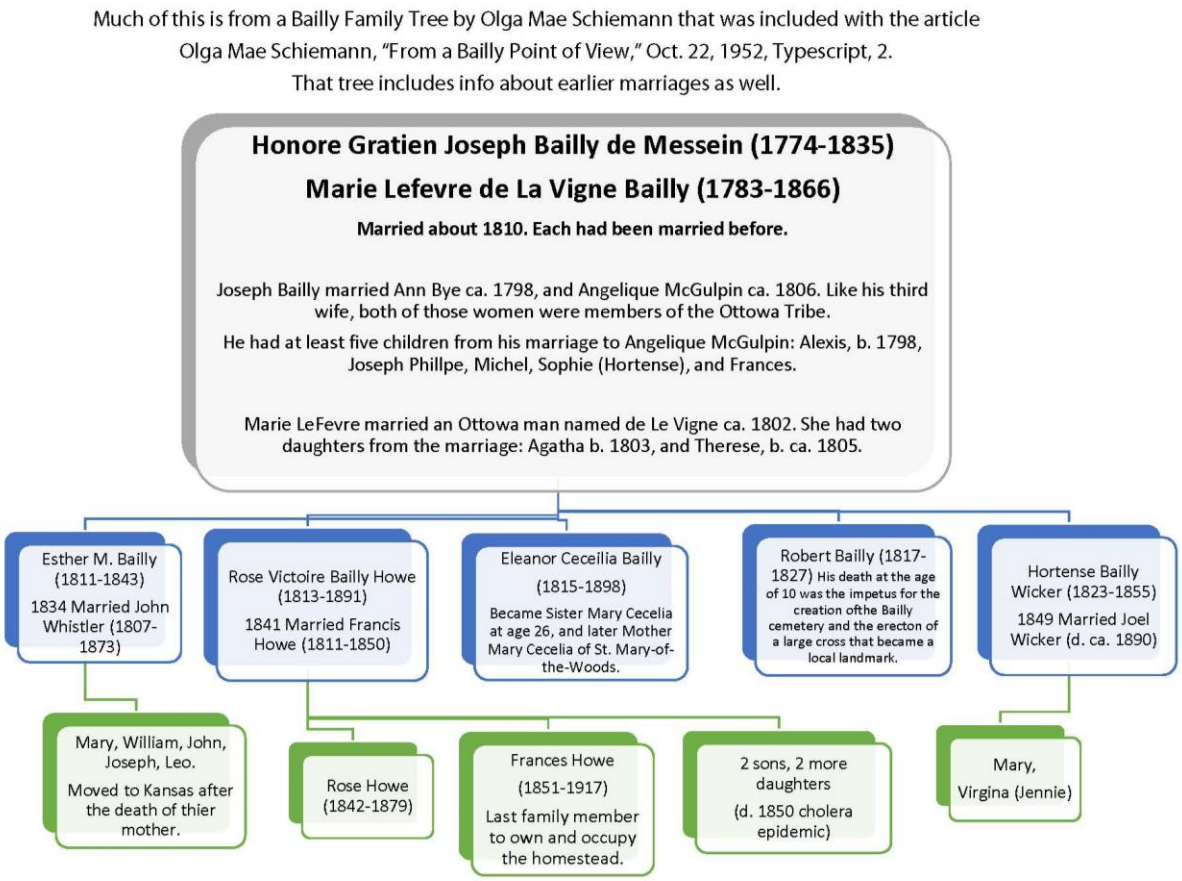


Figure 2.3. Bailly Family Tree. Compiled by Debbie Sheals from a more extensive chart by Olga Mae Schiemann. (Olga Mae Schiemann, "From a Bailly Point of View," Oct. 22, 1952, Typescript).

Summary, Episode I.

Joseph Bailly was the first fur trader of French-Canadian descent to establish a homestead in the Calumet region. Born in 1774 near Montreal, Honore Gratien Joseph Bailly de Messein entered the fur trading business as a young man. At age eighteen (ca. 1792) he was working for a British owned fur-trading company at a post on Mackinac Island by 1796 he was a prosperous independent trader.[58] He married his first wife, Ann Bye, around 1798. That marriage ended and he married Angelique McGulpin ca. 1806.[59] He and Angelique had five children, three boys and

[58] Clemensen, *Historic Resource Study Indiana Dunes*, 1979, 6; Olga Mae Schiemann, "From a Bailly Point of View," Oct. 22, 1952, Typescript, Family Tree.
[59] Brett K. Epich, "Trading Skins for Souls: The Bailly Family in the Calumet Region, 1822-1835," (Master's thesis, Loyola University, Chicago, June 7, 2007 to May 2, 2008, U.S. Department of the Interior, National Park Service), 8.

two girls. He left that family as well, and, and around 1810 he married Marie Le Fevre de la Vigne, who was of French and Ottawa descent.[60] (Both of his earlier wives were members of the Ottawa Nation.) Marie Le Fevre was a widow with two daughters when they married; she and Joseph had five more children (Figure 2.3).[61]

During the War of 1812, Bailly agreed to serve as a liaison between the British and the indigenous people in the Great Lakes, with the intension of securing their alliance to the British.[62] In 1814 he was captured by Americans under suspicion of being a British spy. He spent three months in prison, and lost the rights to his previous fur-trading business. Additionally, American troops destroyed his trading post by fire. Prohibited to operate as a Canadian in the American fur trading industry, Bailly became an American citizen in 1818, and began to work for the American Fur Company.[63]

A series of treaties between American Indian Nations and the United States after the War of 1812, expanded lands for settlement along the Lake Michigan shoreline. In 1822 Bailly secured a license from the United States War Department to operate as an independent fur trader at the Calumet and Little Calumet Rivers in what is now northern Indiana.[64] As the vigor of the fur trading business waned for Bailly in the 1820s, his business endeavors shifted to land speculation.[65] He started acquiring land in the area, including several hundred acres in Section 27, Township 37 North, Range 6 West. In 1824, he moved his wife and children into a log house next to the Little Calumet River, and the property served as the family home for the better part of the next century.[66]

During this time period, a number of log buildings were erected for Joseph and Marie Bailly, to serve as residences and support buildings for the trading business. The most notable of those is the large hewn log residence (HS-18) that still occupies the property today. Other buildings erected during Joseph and Marie's lifetime include the core of what is now the chapel (HS-22) which was a two story kitchen and residence, plus a small one-story log storehouse (HS-21). The house was constructed with a finished exterior that included weatherboards, but most of the interior walls were whitewashed and left unplastered for decades. A number of other log buildings that were built during their lifetimes have since been demolished.

Marie Bailly and her oldest daughter from another marriage, Therese, took an active role in operation of the trading post. Both women have been described as having "remained a part of

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[60] Schiemann, "From a Bailly Point of View," 20.
[61] Clemensen, *Historic Resource Study Indiana Dunes*, 1979, 6.
[62] Clemensen, "Baily Homestead Unit Indiana Dunes National Lakeshore", 1975, 2.
[63] Clemensen, *Historic Resource Study Indiana Dunes*, 1979, 7.
[64] Clemensen, *Historic Resource Study Indiana Dunes*, 1979, 8; Bowers, *The Old Bailly Homestead,* 4.
[65] Clemensen, *Historic Resource Study Indiana Dunes*, 1979, 8.
[66] James R. Sullivan, "Historic Site Survey, The Bailly Homestead, Porter County, Indiana" (U.S. Department of the Interior, National Park Service, Region Five, Philadelphia, PA, April 1958), I.2.

the Odawa (Ottawa) world. They dressed in Indian fashion and spoke Odawa. The only other language they understood was French, but only if it was spoken very slowly."[67] Their Ottawa ties were naturally beneficial to the development of trading relationships with Native Americans in the area, including the locally dominant Potawatomi tribe, since the Odawa language is very similar to that spoken by the Potawatomi.[68]

After Joseph and Marie died, the homestead became the property of Rose Howe, who was at the time of Marie's death their oldest living offspring. Under Rose Howe's ownership, the interior of the house was modernized, and the log kitchen was rebuilt to serve as a private chapel. Around 1875, Rose Howe also had a small two-story brick kitchen and studio (HS-19) erected just east of the main house. Rose Howe retained ownership of the homestead until her death in 1891.

Rose Howe's daughter, Frances Howe, was the final member of the Bailly family to own the property. Around 1896, Frances Howe undertook a large-scale construction program, which included upgrades to all of the buildings still on the homestead today. She also added a two-story log coachman's house (HS-20) around 1900. She made extensive repairs to the house between 1896 and 1904, which included adding a basement and upgrading interior and exterior elements to impart more contemporary Late Victorian Eastlake styling to the house.

The best sources of information about the historic character and features of the Bailly Homestead during this period include a set of ceramic tiles that were made ca. 1900 (Appendix A) plus a set of photographs that were taken of the property ca. 1890 (Appendix B.) The tiles feature images of the homestead that are believed to be based on a combination of photos and drawings; they were designed to be added to a fireplace but were never installed. A firsthand narrative account of happenings at the homestead can be found in Frances R. Howe's self-published book, *The Story of a French Homestead in the Old Northwest* (Columbus, OH: Press of Nitsschke Bros., 1907).[69] A set of annotated photographs in an album titled "*Some remaining views around 'A French Homestead in The Old Northwest,' August 1924*" record the landscape of the Homestead six years after the end of the period and reveal details of historic landscape and architectural features (INDU Archives). Additionally, oral history compiled by park staff in the 1970s and 1980s includes a number of very informative interviews with Margaret Larson, who lived in the brick house (HS-19) as a child and still had very clear memories of the entire homestead as it looked in the 1910s.[70]

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[67] Susan Sleeper Smith, *Indian Women and French Men* (Amherst: University of Massachusetts Press, 2001) 164.
[68] Lee Sultzman, "Ottawa History."
[69] It should be noted that while descriptions of the buildings which appear in this book appear to be accurate, Howe's interpretation of family history may be colored by personal biases.
[70] Oral History Interviews with Margaret Larson, Bailly Homestead, 1972, Bailly Homestead Vertical File, Indiana Dunes National Lakeshore Archives (Hereafter cited as Oral History INDU Archives), 2.

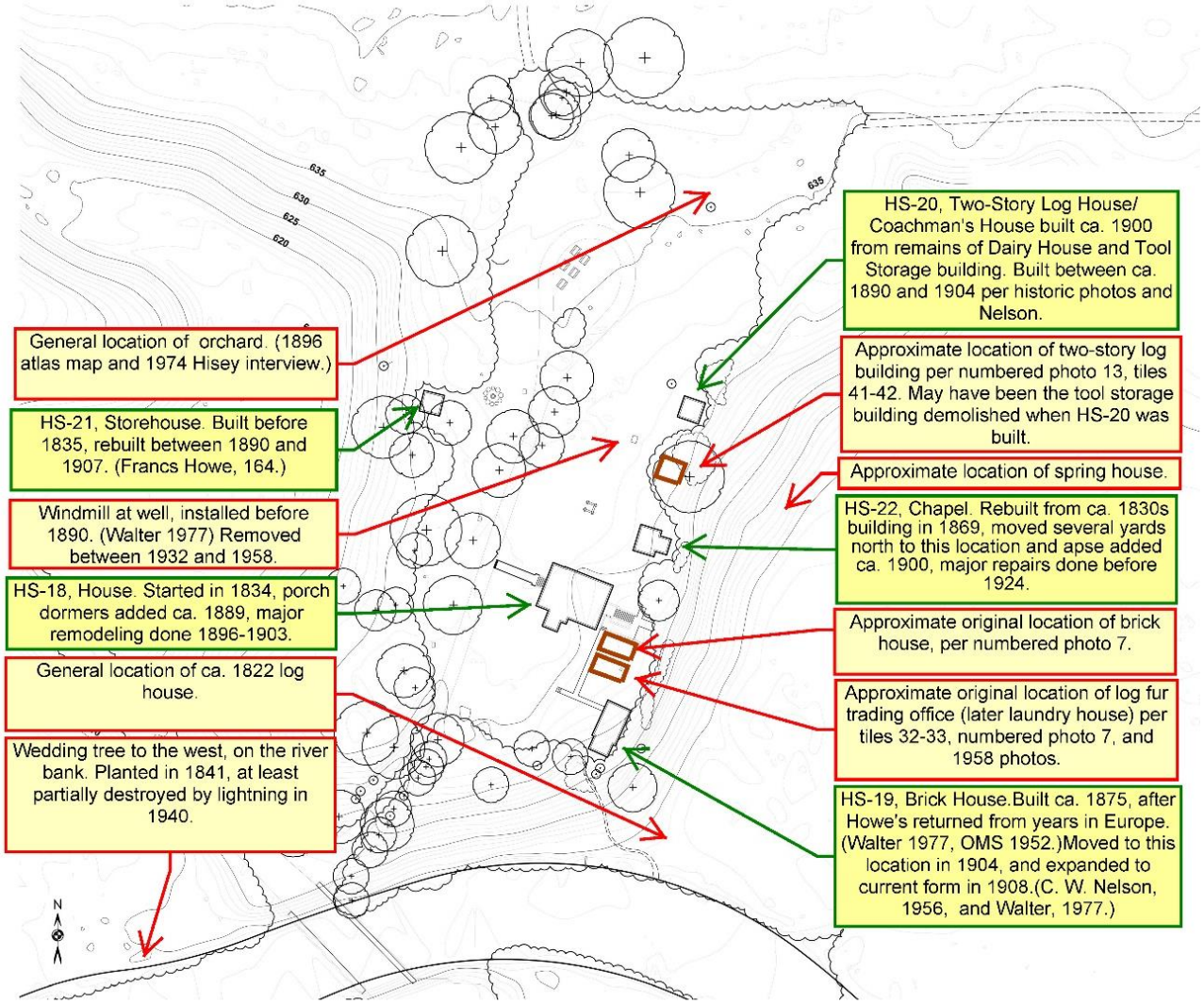


Figure 2.4. Current map of Bailly Homestead, with notes about historic features, past and present. Red boxes indicate features that are no longer extant. (Deb Sheals 2017.)

Episode I: The Bailly Homestead 1822-1918

1774, April 7 Joseph Bailly (Honore Gratien Joseph Bailly de Messein) was born in Saint Anne de Varennes, a village across the St. Lawrence River from Montreal. He was raised and educated in the Catholic Parish of Sainte Anne de Varennes.[71]

1792 ca. Joseph Bailly, age eighteen, began working in the fur business at Mackinac, a British fur trading post in the Great Lakes area. He worked throughout Michigan Territory in the fur trade for the next twenty-two years.[72]

1812-1815 War of 1812 slowed down fur trade due to war and "invasions to the frontier from the British."[73] During this time, Bailly served as a Lieutenant and Adjutant Commissariat in the Canadian Voyageurs.[74]

1814 Joseph Bailly captured by American troops during War of 1812 under suspicion of being a British spy, but released several months later without a trial.[75]

1816 Indiana becomes the 19th state. State boundaries included a narrow strip of land that had been part of the Michigan Territory.[76]

1818 Joseph Bailly became an American citizen.[77]

1822 Joseph Bailly was issued a license to trade at the Calumet and Little Calumet Rivers in what is now northern Indiana. The Bailly homestead was later built in the area of those two rivers. Bowers says the whole family moved here then, but it may have been about 1824, see below. At the time, they thought they were moving to Michigan territory, the southern line of which had been defined in 1787 as being an east-west line through the southern tip of Lake Michigan. That line shifted northward ten miles with statehood, but it was not surveyed until 1827.[78]

1824, June Bailly and Marie build the first cabin on the property, east of current house, in the river floodplain. Then Joseph Bailly leaves her with five kids, her grown daughter Therese and two servants.[79]

1824, Aug. Joseph Bailly returned to find cabin relocated to top of hill. Howe noted that they camped in a grove of young elm trees during the flood, and they later planted a

[71] Schiemann, "From a Bailly Point of View," 15.
[72] Schiemann, "From a Bailly Point of View," 2.
[73] Bowers, *The Old Bailly Homestead*, 5.
[74] Fay L. Hendry, "Bailly, Joseph, Homestead and Cemetery," (National Register of Historic Places, U.S. Department of the Interior, National Park Service, Jan, 6, 1978).
[75] Bowers, *The Old Bailly Homestead*, 5.
[76] Bowers, *The Old Bailly Homestead*, 4.
[77] Schiemann, "From a Bailly Point of View," 18.
[78] Bowers, *The Old Bailly Homestead*, 4.
[79] Howe, *The Story of a French Homestead,* 42.

white ash (*Fraxinus americana*) sapling to mark the campsite. It was a "majestic forest tree" in 1907.[80]

1824, Fall — Joseph Bailly and servants built a better house and other buildings including some for fur trade.[81] Those early buildings may have included a two-story kitchen, parts of which were later used for the chapel (HS-22).[82]

1820s — County history of 1912 notes that Joseph Bailly's fur trade was "materially aided by his wife, who thoroughly understood the Indian language and customs, though she understood French and readily adopted many of the customs of civilization."[83]

1824, ca. — Joseph Bailly also made arrangements with the local Potawatomi tribe to trade in their land. Frances Howe claimed that he offered them monthly payments.[84]

1827 — Robert, only son of Joseph and Marie Bailly, died at the age of ten. He was the first to be buried in the family cemetery, and a large cross on his grave became a local landmark.[85] Bowers says Joseph Bailly built a chapel in Robert's honor the same year of Robert's death, but this is likely in reference to a small lean-to that was located at the cemetery.[86]

[80] Howe, *The Story of a French Homestead, 42.*
[81] Howe, *The Story of a French Homestead,* 43.
[82] Douglas S. Walter, *Historic Structures Preservation Guide Bailly Homestead* (U.S. Department of the Interior, National Park Service, Indiana Dunes National Lakeshore, 1977), 6.2.
[83] Harry G. Cutler, *History of Porter County Indiana*, vol. 1 (Chicago: The Lewis Publishing Company, 1912), 34.
[84] Howe, *The Story of a French Homestead,* 44.
[85] Bowers, *The Old Bailly Homestead*, 6; James R. Sullivan, "Historic Site Survey, The Bailly Homestead, Porter County, Indiana" (U.S. Department of the Interior, National Park Service, Region Five, Philadelphia, PA, April 1958), II.11.
[86] Bowers, *The Old Bailly Homestead*, 6; Weston A. Goodspeed and Charles Blanchard, *Counties of Lake and Porter, Indiana: Historical and Biographical* (Chicago, Illinois: F. A. Battey and Company, 1882), 16.

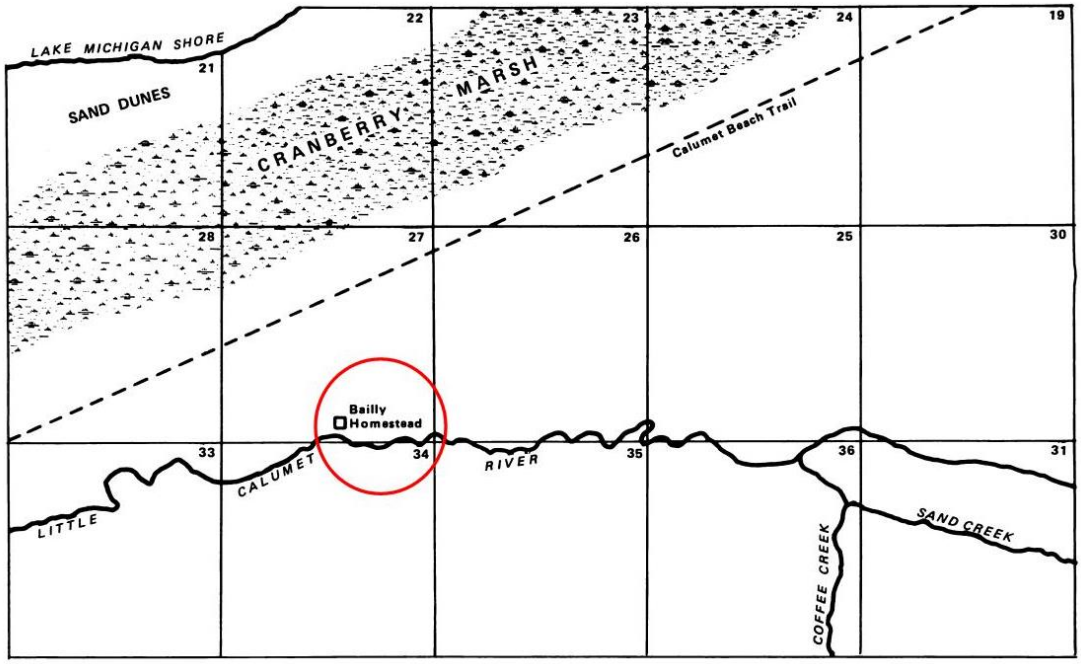


Figure 2.5. Bailly Homestead Area in 1830. (Clemensen, Historic Resource Study Indiana Dunes National Lakeshore Indiana, 1979, 5.)

1830 Dec. 1. Patent for 159.80 acres, S27, T37N, R6W granted to Joseph Bailly.[87]

1830s The homestead may have served as a "station for missionaries," Frances Howe noted that "living rooms of a Catholic household could at short notice be transformed into temporary churches…in our homestead the parlor was the sacristy, where confessions were heard, and the dining room the sanctuary, where mass was celebrated." She said that description might have been of an earlier log house on the homestead rather than the current main house.[88]

1830s Joseph Bailly opens a tavern on the Chicago Detroit Road.[89] (Figure 2.5)

1830s, ca. Frances Howe wrote later that servants, both French and Indian, "gathered around the huge fireplace in their own quarters." And "sometimes they were called into the family sitting-room to listen to simple lectures on geography and history, or to receive religious instruction…"[90]

[87] Certificate 13300, info from Abstract of Title cited in Sullivan, "Historic Site Survey, The Bailly Homestead, Porter County, Indiana," 1958, 1.2.
[88] Howe, *The Story of a French Homestead,* 46. Although research suggests that Howe's book contains a good deal of embellishment and reinterpretation of history, it does provide some basic history of the homestead, as well as a first-hand glimpse into the thoughts of a Bailly family member.
[89] Walter, *Historic Structures Preservation Guide Bailly Homestead,* 6.2.
[90] Howe, *The Story of a French Homestead,* 49. If Joseph Bailly did indeed host such gatherings, they probably took place in an earlier building, not in the existing house (HS-18).

1830s Frances Howe wrote that life at the homestead continued on an even keel" with fur trading and other activities. Road surveyed between Detroit and Fort Dearborn (Chicago) was "merely a confirmation of the old Indian trail across the Southern Lakes region….this trail crossed the larger front lawn" of the Homestead (Figures 2.6 and 2.8).[91]

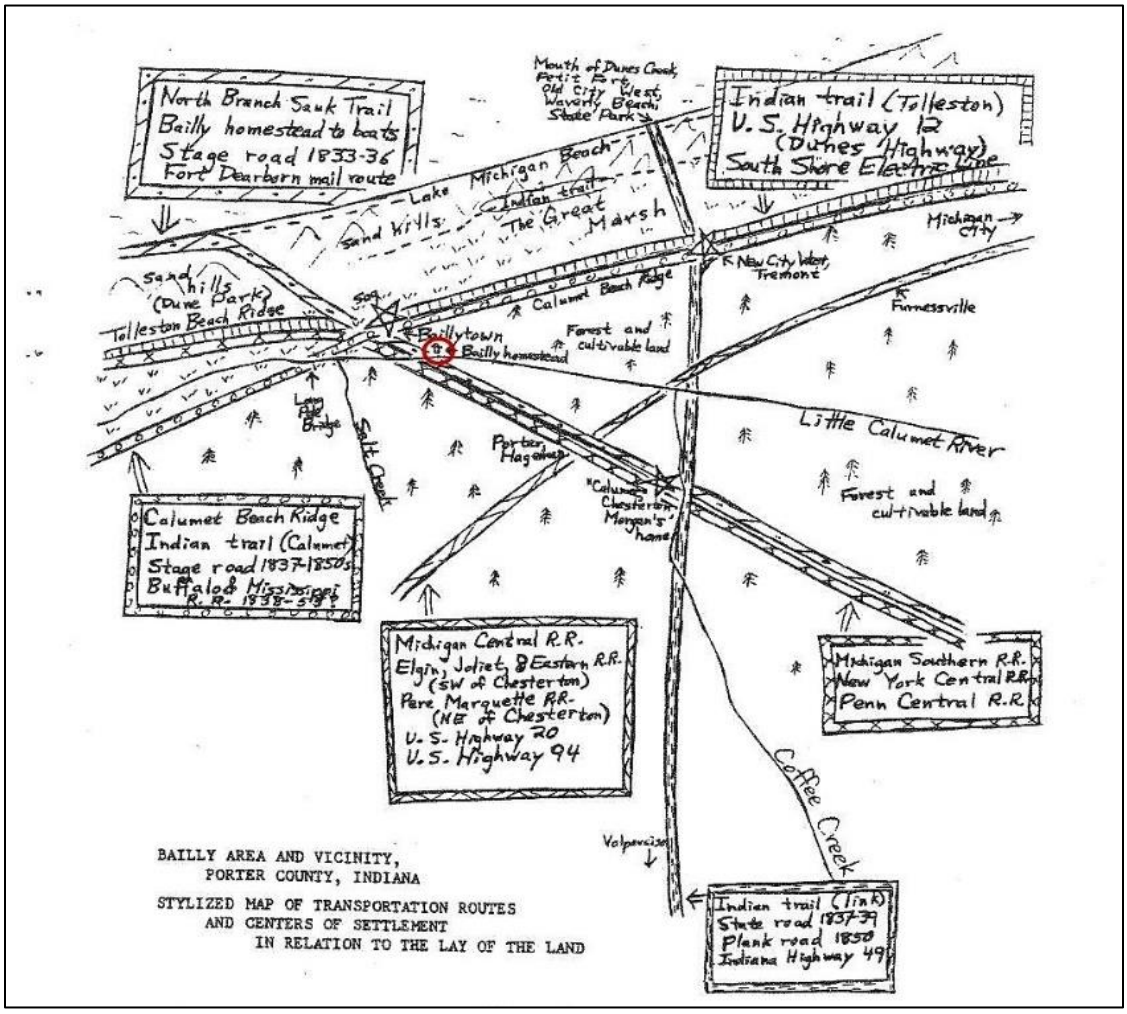


Figure 2.6. Map of early trails in the region. (Cook and Jackson. *The Bailly Area of Porter County, Indiana*: *Geo-historical Study*, 13.)

1831, Oct. Bailly purchased 6.12 more acres in S34, T37N, R6W from U. S. Government.[92]

1831 Mail road between Detroit and Chicago established, generally along former Indian Trail.

[91] Howe, *The Story of a French Homestead,* 62.
[92] Sullivan, "Historic Site Survey, The Bailly Homestead, Porter County, Indiana," 1.3.

1832 Joseph Bailly reportedly facilitated a treaty with resident Potawatomi groups that opened land to American settlement. 1912 history says homestead "had grown to six or eight log cabins in which lived his French employees who assisted him in his fur trade."[93]

1833, Dec. Joseph Bailly prepares a plat for "Town of Bailly," located nearby in Section 28. Only a few lots were sold and the town did not develop, but the name Baillytown did end up on some early maps, and the homestead was sometimes referred to as "the house at Baillytown."[94]

1834 ca. Initial construction of the main house (HS-18), of hewn logs with weatherboards.[95] He also built buildings for the fur trade.

1834 Description of the farmstead from "A Winter in the West," quoted by Bowers described the homestead: "The trading establishment consisted of six or eight log cabins of most primitive construction, all of them gray with age and so grouped on the bank of the river to present an appearance quite picturesque."[96]

1835, Dec. Death of Joseph Bailly in early two-story log kitchen on the homestead.[97] He was buried in the cemetery north of the homestead. His stepdaughter (probably Therese De La Vigne) may have died in same building around 1843.[98] Joseph Bailly's son from his first marriage, Alexis Bailly, came to settle the estate but did not stay long.[99]

[93] Cutler, *History of Porter County Indiana,* 35.
[94] Bowers, *The Old Bailly Homestead*, 9.
[95] Bowers, *The Old Bailly Homestead*, 5; Sullivan, "Historic Site Survey, The Bailly Homestead, Porter County, Indiana," I.1.
[96] Bowers, *The Old Bailly Homestead*, 8.
[97] Clemensen, *Bailly Homestead Unit, Determination of Structures Composing the Bailly Homestead,* 1975, 6.
[98] Brett K. Epich, "For Family and Faith: The Baillys after 1835" (Loyola University, Chicago, 2008, Commissioned by U.S. Department of the Interior, National Park Service), 12; Clemensen, *Bailly Homestead Unit, Determination of Structures Composing the Bailly Homestead,* 1975, 6.
[99] Epich, "For Family and Faith: The Baillys after 1835," 13.



Figure 2.7. Drawing of Joseph Bailly reading to indigenous people inside his house. Drawing reproduced on ceramic tiles. This may be set in a different house on the property, since they did not start building the main house (HS-18) until 1834, at which time he was already ill. He died in 1835. This could be a depiction of the since-demolished "Dower House" which was described in Pfanz and Jones, *Bailly Homestead Historic Structure Report, Historical and Architectural Data, 1972, 28.* ("Fireplace Tiles 49-50," Catalogue #s 9658-9678, INDU Museum Collection; Appendix A.)



Figure 2.8. Drawing of the homestead as it may have appeared from the river in the 1840s, view is looking generally northeast. Drawing reproduced on ceramic tiles. This is part of a set of tiles made for Frances Howe ca. 1900. The tile images are believed to have been taken from both photos and drawings. The photos probably dated to around 1890; the drawings may have been made by Rose Bailly Howe, who died in 1891. ("Fireplace Tiles 52-53," Catalogue #s 9658-9678, INDU Museum Collection; Appendix A.)

The farmstead appears to have been vacant off and on from 1835 to 1850.

1835, ca. Marie and her youngest daughter Hortense (then 12) may have left the homestead to live with grown daughter Agatha in Mackinac. The other daughters were living elsewhere by then.[100] Historian Brad Epich indicated that Marie, Agatha, and Marie's oldest daughter Therese stayed and traded until Therese died in 1843; he stated that they were active in general trading, but not furs.[101]

Late 1830s Esther Bailly, oldest of Joseph and Marie's daughters, returns to house with husband John Whistler, who she married in Chicago in 1834.[102] John Whistler was active in operation of the homestead.[103]

1839 Itinerant priest Fr. Gueguen, who performed services at the homestead, writes about Esther and John Whistler running the house and arranging for services while Marie was away.[104]

1841 Eleanor Bailly, third daughter of Joseph and Marie, become Sister Mary Cecelia, started teaching at Saint Mary-of-the Woods Academy, which was founded a year earlier. It is now Saint-Mary-of-the-Woods College.[105]

1841 Rose Bailly, second daughter of Joseph and Marie, marries Francis Howe, possibly at the farmstead, and they stayed on there after the marriage.[106] They planted a "Wedding Tree", which consisted of one Elm and one Oak sapling, which grew together to become a local landmark. Despite the demise of one of the trees and the necessity of bank stabilization, one of the two trees remained in 1939.[107]

1843 Marie and Hortense Bailly return to the homestead with Marie's daughter Therese.[108]

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[100] Bowers, *The Old Bailly Homestead*, 9.
[101] Epich, "For Family and Faith: The Baillys after 1835," 12.
[102] Olga Mae Schiemann, "From a Bailly Point of View," Family Tree; Bailly Family and Homestead Exhibit, July 2016, Westchester Township History Museum and Duneland Historical Society, Chesterton, IN (Hereafter cited as Exhibit WTHM).
[103] Epich, "For Family and Faith: The Baillys after 1835," 14.
[104] Epich, "For Family and Faith: The Baillys after 1835," 15; "Clergyman is welcomed at Bailly home," *Vidette-Messenger* Valpariaso, IN, Feb. 2, 1985, 2.
[105] Robert Griffin, "Eleanor Baily and Saint Mary-of-the-Woods," 1-2, Clipping, Bailly Vertical File, Westchester Township Historical Museum (Hereafter Cited as Bailly file WTHM).
[106] Epich, "For Family and Faith: The Baillys after 1835," 18; Schiemann, "From a Bailly Point of View," Family Tree.
[107] Workers of the Writer's Program of the Work Projects Administration, comp., *The Calument Region Historical Guide,* Garmin Printing Co., 1939, 25, Bailly Vertical File, Westchester Township History Museum and Duneland Historical Society, Chesterton, IN (Hereafter cited as Bailly file WTHM).
[108] Bailly Family and Homestead Exhibit, Bailly file WTHM.

1843 Esther dies suddenly, and her husband and sons relocate soon after to Kansas. (The Potawatomi tribe had relocated there.)[109] Rose's husband, Frances Howe, takes over management and makes a deal to supply lumber for the railroad.[110]

1840s Lumbermen inhabit the homestead; they may have added a kitchen building.[111]

1843, ca. Therese dies, probably at the homestead in the kitchen. Marie closes the house again and moves to Mackinac with Agatha, a daughter from her first marriage.[112]

1848-1856 Sister Mary Cecelia (Eleanor Bailly) serves as director of Saint-Mary-of-the-Woods.[113]

1850 Rose's husband, Francis Howe, and children die of cholera. Marie was still gone at the time.[114]

1852, ca. Rose Bailly Howe, newly widowed, returns to the farmstead with her daughters Rose (then age 8) and Frances (an infant, born in 1851, shortly after her father's death). Her mother, Marie Bailly joins them from Mackinac. They added plaster to some rooms then, but Marie did not allow many changes. Marie "chose the old kitchen building for her hermitage." She did it partly because that was where Joseph and Therese had died.[115] The old kitchen building is believed to be on the right in Figure 2.9 below.

[109] Epich, "For Family and Faith: The Baillys after 1835," 18.
[110] Epich, "For Family and Faith: The Baillys after 1835," 19.
[111] Bailly Family and Homestead Exhibit, Bailly file WTHM.
[112] Epich, "For Family and Faith: The Baillys after 1835," 19.
[113] Griffin, "Eleanor Baily and Saint Mary-of-the-Woods," 1-2, Bailly file WTHM.
[114] Epich, "For Family and Faith: The Baillys after 1835," 19.
[115] Howe, *The Story of a French Homestead,* 146.



Figure 2.9. Drawing of outbuildings at the homestead as they may have looked before Marie Bailly's death in 1866. The woman on the right is likely Marie. Note the back steps to the main house, HS-18, to the right. Niether of the two-story buildings shown here are still standing. The building on the left in this image is also shown in Historic Photo #13 in Appendix B. ("Fireplace Tiles 41-42," Catalogue #s 9658-9678, INDU Museum Collection; Appendix A.)

1850s, ca. Rose and Frances Bailly were sent to St. Mary's Institute at Terre Haute for school. Rose graduated with honors in 1860. Their aunt, the former Eleanor Bailly, also known as Sister Mary Cecelia, was the director at the time.[116]

1856, ca. Sister Mary Cecelia became Mother Mary Cecelia.[117]

1860s, ca. Library at the homestead included 200-300 books, which Frances preserved.[118]

1866 Marie Bailly dies on September 15. Frances Howe noted work was done shortly after her death but was not specific; it was probably just minor upgrades. The work was done by a Swedish carpenter named Johnson.[119] The kitchen/Marie's quarters were used for Sunday devotions after her death.

The nearby town of Monee, Illinois is named after Marie Bailly. In the native language, the letter R is not used and Monee is an adaptation of her name.[120] Marie and Therese were more closely tied to their Ottawa heritage than Marie and Joseph's four daughters, and her death marked a break of sorts from the family's indigenous roots. Granddaughter Frances Howe, for example, did not

[116] Bowers, *The Old Bailly Homestead*, 6; Griffin, "Eleanor Baily and Saint Mary-of-the-Woods," 1-2, Bailly file WTHM.
[117] Griffin, "Eleanor Baily and Saint Mary-of-the-Woods," 1-2, Bailly file WTHM.
[118] Bowers, *The Old Bailly Homestead*, 10.
[119] Howe, *The Story of a French Homestead,* 158.
[120] Epich, "For Family and Faith: The Baillys after 1835," 20.

want any association with her family and indigenous people. She wrote her book in part to "clear the record." She also wrote letters to the local paper to the same effect. Epich argues convincingly enough that the property should be recognized as an early Métis Catholic social and economic center.[121]

1869 Rose Bailly Howe, the oldest living offspring of Marie, becomes owner of the property, after numerous settlements among heirs of Marie and Joseph Bailly.[122] She gradually sold off family lands over the next sixteen years, but retained the homestead and land around it.[123]

1869-1874 Rose Bailly Howe takes her daughters on a five year tour of Catholic shrines abroad. This was just before Frances was set to graduate from school.[124]

1869 The two-story kitchen where Marie had lived was modified to create a one-story saddle notched chapel (HS-22). Much of the original building had to be taken apart for that project, but the original front wall was largely retained, including the second story doorway, which was covered with planks (Figures 2.9 and 2.10). The work was ordered by Rose Victoire Bailly Howe, to honor the deaths of her parents and sister, who all died there. She had it built while she was traveling. The project included adding a brick foundation and a bell, and plastering the interior. The bell came from St. Mary's Academy in Terre Haute. The flooring was from the second floor of the old kitchen. It was built by the same Swedish carpenter named Johnson that had worked on the house a few years earlier.[125] A belfry and apse were added later.[126]

1874 Rose Bailly Howe and her daughters, Rose and Frances, return from trip

1875 ca. A two-story brick house (HS-19) was built for Rose Bailly Howe, with a studio on the second floor and a kitchen on the first.[127] The brick house was originally attached to the southeast corner of the main house by a porch at the first floor and a breezeway at the second floor (Figure 2.12), and was moved to new location in 1904 (1904 entry below). It was built with a crucifix in the gable end and niches for St. Joseph and the Blessed Virgin next to the door. Frances Howe

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[121] Epich, "For Family and Faith: The Baillys after 1835," 23-27; "The Métis: A New Canadian Nation," *Canada's First Peoples*, accessed October 9, 2017, http://firstpeoplesofcanada.com/fp_metis/fp_metis1.html. Métis identifies a group of people who were the children of Native (Indigenous) women and European fisherman, trappers and hunters from Canada and the north boundaries of the United States. This group of people were often influenced by the teachings of the Catholic Church and the Indigenous culture.

[122] "Deed Book V," 332, Porter County Recorder's Office, Deed Records, Porter County Courthouse, Valparaiso, Indiana. Location of deed is also recorded in an insurance company note at INDU 103.

[123] Howe, *The Story of a French Homestead,* 157.

[124] Schiemann, "From a Bailly Point of View," 14.

[125] Howe, *The Story of a French Homestead,* 159-164.

[126] Walter, *Historic Structures Preservation Guide Bailly Homestead,* 6.2. Sullivan, "Historic Site Survey, The Bailly Homestead, Porter County, Indiana," 1958, I.1.

[127] Walter, *Historic Structures Preservation Guide Bailly Homestead,* 6.2*;* Historical Background I-1.

wrote on historic photo #6 that it was built after they got back from Europe, which was in 1874.[128]

1876 County Atlas shows Rose Bailly Howe owned at least 120 acres, including 80 acres surrounding the Homestead.[129]

1879 Rose Howe (the daughter of Rose Bailly Howe) dies at the homestead, of an unspecified illness.[130]



Figure 2.10. Chapel ca. 1890. Women shown are probably Frances Howe (left) and her niece, Jennie Wicker. The flat panel above the doorway is the remainder of the second story doorway. The crucifix shrine in that panel was modeled after a wayside shrine near Brussels that they were familiar with. Note how close the chapel is to the back porch steps. (Howe, *The Story of a French Homestead,* 164*;* Historic photo set, #9; Appendix B.)

[128] Schiemann, "From a Bailly Point of View," 13; Historic Photo #6; Appendix B.
[129] A. G. Hardesty, *Illustrated Historical Atlas of Porter County, Indiana* (Valparaiso, IN.: A.G. Hardesty, 1876), map*, Library of Congress*, accessed June 08, 2017, https://www.loc.gov/item/2007626934/.
[130] Schiemann, "From a Bailly Point of View," 14.





Figure 2.11. Left: Photo of HS-20, with the base of the windmill and a shed roof addition on the north side of the building, 1916. Photo looking east. Right: Photo of a similar windmill installed at the Bailly Cemetery about the same time period. Both windmills featured built-in elevated water tanks. (Catalogue #3111, INDU Museum Collection.)

1880, ca. Windmill erected over a well located north of house.[131] It remained there into the mid-1900s. Photos show that it was removed before 1958 and the well covered with a small building.

1882 County history describes the homestead, with the house, built in 1834, with weatherboards, chapel with bell, and "log hut in which Indians used to store their property." Also other buildings "hoary with age."[132]

1885 The nearby Chellberg Farmhouse built. It is of brick, with construction methods similar to those used for the Brick House (HS-19.) Architect Early H. Reed observed in 1972 that the construction methods of the brick house on the Bailly Homestead were comparable to those of the Chellberg and Nelson Houses in the area, which were of a "late 1880s early 1890s type common in Porter County."[133]

1889, ca. Dormers added to the west porch roof and likely to the east side of the roof as well.[134]

[131] Walter, *Historic Structures Preservation Guide Bailly Homestead,* 1977, 6.2, dates the change as between 1840 and 1890.
[132] Goodspeed and Blanchard, *Counties of Lake and Porter, Indiana,* 52.
[133] Handwritten notes from Earl H. Reed, FAIA, Chair, AIA Committee on Preservation of Historic Buildings, Chicago, 1972, Catalogue #4589, INDU Museum Collection.
[134] "Historic Numbered Photo 5, Historic Numbered Photo Set, INDU Museum Collection, Appendix B.



Figure 2.12. "Historic Numbered Photo #7." (Historic Numbered Photo Set, INDU Museum Collection; Appendix B.) This is part of a set of fifteen black and white prints of various scenes at the Bailly Homestead, with added notes believed to be made by Frances Howe. ca. 1890. This photo was taken before the brick house was moved in 1904. The back of this print includes a note that reads: "*Bailly Homestead ca. 1890. Housekeeper Amanda Gustafson. Donated by Leonard Johnson. H-01-0095*." Leonard Johnson's Aunt was Amanda Johnson; it is possible that her maiden name was Gustafson. (Oral History Interviews, Leonard Johnson, 1972, INDU Archives.)

1890, ca. Series of photos taken at the Homestead, including a photo of the back of the house, show a board sidewalk and the brick house in its original location (Figure 2.12). Note the second floor breezeway to the brick house connecting to the porch. The second floor east porch had a lavatory that was used in summer months.[135] The photographer has not been identified, but a note in a letter written in the 1950s mentions "the large clear fine views taken by Bodin of Michigan City of all the Homestead scenes."[136] A search of Michigan City historical sources revealed no photographer of that name. The date of ca. 1890 for the series is

[135] Note on the back of "Historic Numbered Photo 5," Historic Numbered Photo Set, INDU Museum Collection (Appendix B); Interview with Margaret Larson, Bailly Homestead, 1972, Bailly Vertical File, INDU Archives.
[136] Letter from Julia Altrocchi to Leah Horseman, March 17, 1953, Catalogue #3691, INDU Museum Collection.

based upon a label on one similar photo, as well as the inclusion of Rose Bailly Howe in one of the photos (Figure 2.13).

1891, May 22 Rose Bailly Howe dies at the age of 78. She was the wife of Francis Howe, and third daughter of Joseph Bailly.[137] Her daughter, Frances Howe, inherited the property after Rose's death.[138]



Figure 2.13. Photo of Rose Bailly Howe, Frances Howe, and Jennie Wicker, on the west porch of the house (HS-18) ca. 1890. This print appears to be contemporary to the Historic Numbered Photo Set, but it does not have the same type of numbering or handwritten notes on the back. Note that this photograph was taken prior to the house being raised. The porch floor appears to be in poor condition. Also the porch floor appears to be nearly level with the interior floor. The photo also shows that there was a center hall with a flush wood floor all the way through the house. Through the hall is seen a niche for a statue of Mary, as well as the door into the brick house. (INDU Museum Collection.)

1891, July 1 *Chesterton Tribune* notes that Frances R. Howe is at her "country residence in Baillytown" (probably the homestead) and is arranging for the publication of a Catholic literary journal.[139]

[137] "Chesterton Tribune Articles List, Bailly Homestead," Bailly Vertical File, Westchester Township History Museum and Duneland Historical Society (Hereafter cited as Bailly file WTHM).
[138] Clemensen, *Bailly Homestead Unit, Determination of Structures Composing the Bailly Homestead,* 1975*,* 6; Sullivan, "Historic Site Survey, The Bailly Homestead, Porter County, Indiana," 1958, I.2.
[139] "*Chesterton Tribune* Articles List, Bailly Homestead," Bailly file WTHM.

1892, April 15 Frances R. Howe spent the winter in Hot Springs, Arkansas for treatment of rheumatism. Returning to Bailly home in May of 1892.[140]

1894, Nov 9 Frances R. Howe of the Bailly Homestead leaves for her winter home in Hot Springs, AR. (Approximately Nov. to May).[141] She gets a passport that same year.[142]

1894 Letter from Frances R. Howe at Mercy Convent in Hot Springs, AR to Mrs. Johnson about household info. Mentions she wishes Alfred would "send freight bill for stone." Also notes the Amanda is in need of nursing and that her face still hurts but she is getting better.[143]

1895 County Atlas still has Rose Howe as owner of 120 acres and homestead.[144]

1896 **Frances Howe begins a major building program, which lasts until 1904.**

1896, Sept. Bill for brickwork foundation, reinforcements under porch steps, and plastering a chimney at the house, to Frances Howe from C. P. Nelson.[145]

1896, Oct. 10 "Frances R. Howe has returned to spend the winter in the Chesterton area and oversee the rebuilding of her Baillytown home**.** She will live at Furnessville in the meantime."[146]

1897, Jan 2 "Alfred Johnson, who lives at Miss Howe's place, is ill along with his baby and the hired man."[147]

1897 Letter from Frances Howe to Mr. Blackwell, about some logs she had left him. She asked him to give Alfred as many oak logs as would fill up her car, since there had been a delay in him sawing them into planks and said to saw up the rest. Some were to be used for flooring, ceilings casing, and 2 x 4s. Other oak and walnut logs into 1-inch planks, except large walnut, which was to go into 2-inch planks.[148]

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[140] "*Chesterton Tribune* Articles List, Bailly Homestead," Bailly file WTHM.
[141] "*Chesterton Tribune* Articles List, Bailly Homestead," Bailly file WTHM.
[142] Family papers, Bailly Homestead Vertical File, INDU Archives.
[143] Family papers, Bailly Homestead Vertical File, INDU Archives.
[144] Lee and Lee, "Lee and Lee's Atlas of Porter County, Indiana: Illustrated*"* (Chicago: Lee and Lee, 1895), map, *Library of Congress*, accessed June 08, 2017, https://www.loc.gov/item/2007626933/.
[145] C. P. Nelson, Letter to Frances Howe, Sept 14, 1896. Family papers, Bailly Homestead Vertical File, INDU Archives.
[146] "*Chesterton Tribune* Articles List, Bailly Homestead," Bailly file WTHM.
[147] "*Chesterton Tribune* Articles List, Bailly Homestead," Bailly file WTHM.
[148] Frances Howe, letter to Mr. Blackwell, March 10, 1897. Family papers, Bailly Homestead Vertical File, INDU Archives.





Figure 2.14 Photos of the house taken before and after the foundation was added. Left: Historic Numbered photo #6, ca. 1890. A note on the back of the photo, believed to have been written by Frances Howe, says “the ladder was to pick cherries.” (Historic Numbered Photo Set, INDU Museum Collection; Appendix B.) Right: The house in 2017. (Deb Sheals 2017.)

1897 Sept. 4 Charles Bradley is working for Miss [Frances R.] Howe during the rebuilding of her Baillytown home.[149]

1897 Oct. 23 Frances R. Howe’s coachman met her and Miss Peterson at the evening train of the Michigan Central. As the carriage pulled out the horses ran away and the carriage was wrecked. They were unhurt and walked home.[150]

1897, ca. Early storehouse (HS-21) reconstructed. Frances Howe wrote in 1907 that it had been “subjected to the same process of repairs as the chapel.”[151] That work was done after it was photographed in 1890, and before she wrote the book.

[149] “*Chesterton Tribune* Articles List, Bailly Homestead,” Bailly file WTHM.
[150] “*Chesterton Tribune* Articles List, Bailly Homestead,” Bailly file WTHM.
[151] Howe, *The Story of a French Homestead,* 164.

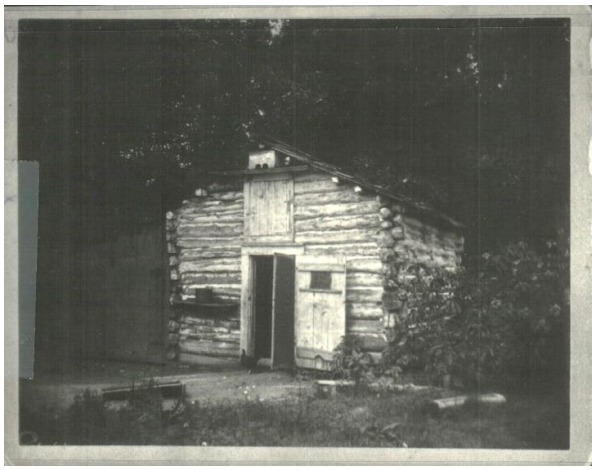
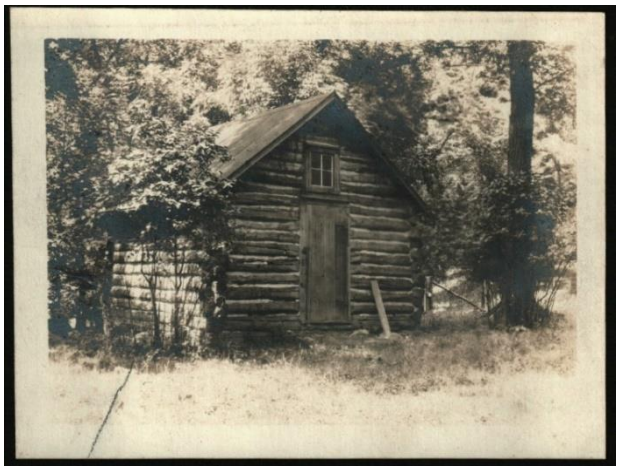



Figure 2.15. Storehouse, before and after early reconstruction. Left: storehouse in 1890. (Historic Numbered Photo #16" Historic Numbered Photo Set, INDU Museum Collection; Appendix B.) Right: Storehouse in 1924 ("Storehouse," 1924 Photo Album, INDU Museum Collection.)

1899-1903 Porter County Appraisal records show increase in value of homestead. Improvements described in exhibit notes as "Raised home to install basement. Smaller window in northeast corner for new stairway. Removed log joists and floor in parlor as well as whitewood ceiling. Parlor material used to redecorate chapel. Conservatory added. A kitchen located in basement southeast corner with dumb waiter to first floor. Chapel moved 25 feet north."[152]

1899, Jan 28 Frances R. Howe and Miss Emma Bockman (adopted daughter of Frances Howe) left for California.[153] Frances Howe got a passport that same year.[154]

1899 June 24 Frances R. Howe returns from Los Angeles, CA for the summer.[155]

1899, Oct. 21 M. E. Carver, of Michigan City, installs "parquette" floors in five rooms of Miss Howe's house (Bailly Homestead).[156]

1899, Nov 18 Frances R. Howe sails to Europe with her adopted daughter (Emma Bockman (spelled both Bockman and Bachman in various articles). They expected to be gone from Baillytown for five years so the daughter could complete her education in Europe.[157] Work on the house may have continued while they were gone.

[152] Bailly Family and Homestead Exhibit, research notes Bailly file WTHM.
[153] "*Chesterton Tribune* Articles List, Bailly Homestead," Bailly file WTHM.
[154] "Ancestry.com: Databases and Record Collections," *Ancestry.com,* USA, accessed April 2017-July 2017, http://www.ancestry.com.
[155] "*Chesterton Tribune* Articles List, Bailly Homestead," Bailly file WTHM.
[156] "*Chesterton Tribune* Articles List, Bailly Homestead," Bailly file WTHM.
[157] "*Chesterton Tribune* Articles List, Bailly Homestead," Bailly file WTHM; Clemensen, *Bailly Homestead Unit, Determination of Structures Composing the Bailly Homestead,* 1975, 6-7.

1899 Dec. 23 Frances R. Howe and Emma Bockman are living in Brussels, Belgium.[158]

1900, ca. Frances R. Howe did more work on the chapel (HS-22). The building was moved several yards to the north and an apse was added. She added one or more stained glass windows using some material from the main house. The apse replaced a large original fireplace.[159] About the same time, work was done on both two-story porches of the house, and a conservatory was added to the south wall of the house.

1900, ca. Two-story log building (HS-20) constructed from remains of Marie Bailly's dairy house and Joseph Bailly's tool shed. Frances Howe wrote that it was built to serve as a landscape companion for the chapel, but did not give a specific construction date. It was not included in 1890s photo set, so it was likely built after that time, as part of the larger building project. It was definitely in place by 1904, according to an article by C. W. Nelson.[160]

1902 Frances R. Howe and Emma Bachman sail from Italy on February 12 and return to the homestead by April 4; they spent three years in Europe.[161]

1904 Brick House (HS-19) moved away from original location by Main House. A description of the house as it appeared in 1904 also notes that the greenhouse was in place and there was a windmill to the north of the house. The description was written by C. W. Nelson, who worked at the farm as a young man. He also noted that he "relaid the brick floor in the basement of the main house" in August 1904.[162] The brick walk to the Main House was also laid at this time.[163]

1904 Caretaker Peter Larson and family moved in to the Brick House. His daughter, Margaret Larson, lived to be very old and was a valuable source of info about the house in later years. She was interviewed by NPS staff in the 1970s and many times later about what the farmstead looked like at the time.[164]

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[158] "*Chesterton Tribune* Articles List, Bailly Homestead," Bailly file WTHM.
[159] Howe, *The Story of a French Homestead,* 164*;* Walter, *Historic Structures Preservation Guide Bailly Homestead,* Sec. 6, 2. Walter dated this change ca. 1891, but Howe wrote that it was done after she inherited the property in 1891.
[160] Howe, *The Story of a French Homestead,* 165*;* Nelson, "Miss Frances R. Howe and the Bailly Homestead As I Knew Them in 1904," Bailly file WTHM.
[161] "*Chesterton Tribune* Articles List, Bailly Homestead," Bailly file WTHM.
[162] Nelson, "Miss Frances R. Howe and the Bailly Homestead As I Knew Them in 1904," 2, Bailly file, WTHM.
[163] Howe, 1907, p.42, cf. Pfanz and Jones, Bailly Homestead HSR, 1972, p.10.
[164] Oral History Interviews, Margaret Larson, interviewed by Harry Pfantz and Thomas Jones, Bailly Homestead, June 1972, INDU Archives.



Figure 2.16. Photo of the two-story log house as it looked in 1916.
(Catalogue #3111, INDU Museum Collection.)

1904, ca. Frances Howe installs an ornate mantelpiece in the house to commemorate its use as a religious building. Although Margaret Larson thought that the mantelpiece was hand carved by Mrs. Ora Green of Chesterton, it does not appear to be hand crafted.[165] It is more likely to have been ordered from the same millwork company that supplied the new staircase (Figure 2.17).



Figure 2.17. Dining Room mantelpiece, main house. The framed photo is part of the original mantelpiece. (Strata 2017.)

- Ca. 1904, end of building program –

[165] Oral History Interviews, Margaret Larson, Bailly Homestead, 1972, INDU Archives.

Work Completed ca. 1896 to ca. 1904.

- Raised house, new foundation and basement kitchen in house
- Dumb waiter installed in dining room.
- Added a conservatory to south wall of house.
- New stairway and smaller window in northeast corner.
- Removed log joists and floor in parlor as well as whitewood ceiling. Parlor and dining room floors lowered and first floor re-framed with new lumber.
- New parquet flooring in five rooms of the house (likely the parlor, Dining Room, Hall, and two bedrooms on the second floor). Third floor may have been added later.
- Chapel moved 25 feet north, apse and new foundation added.
- Parlor material used to redecorate chapel.
- Moved Brick house to the south.
- Reconstruction of Storehouse.

Figure 2.18. List of construction projects completed by Frances Howe ca. 1896 to ca. 1904. (Deb Sheals 2017.)

1905, Aug. Two statements from Frances R. Howe claiming that she is not an Indian are published on the front page of the Chesterton Tribune.[166]

1906, Nov. 8 Frances R. Howe announces intention to write a history of the Bailly Homestead. "She says readers will admit that in this case truth is not only stranger than fiction but far more beautiful."[167]

1907, Feb 14 Local newspaper writes that "The Story of a French Homestead in the Old Northwest," by Frances R. Howe, is reported to give "much early history of this community."[168]

1908, ca. Addition was made to the brick house (HS-19), and the basement access was relocated.[169] The construction methods used for the addition are very similar to those used for the conservatory that was added to the south wall of the house sometime before 1904.[170]

[166] "*Chesterton Tribune* Articles List, Bailly Homestead," Bailly file WTHM.
[167] "*Chesterton Tribune* Articles List, Bailly Homestead," Bailly file WTHM.
[168] "Chesterton Tribune Articles List, Bailly Homestead," Bailly file WTHM.
[169] Walter, *Historic Structures Preservation Guide Bailly Homestead,* 1977, 6.3.
[170] Nelson, "Miss Frances R. Howe and the Bailly Homestead As I Knew Them in 1904," 2, Bailly file, WTHM. Mr. Nelson noted that the conservatory was in place when he helped dig a new foundation for the brick house in 1904.

1909, June The local newspaper writes that the "old homestead near Baillytown" was deeded to an order of nuns for use as a convent.[171] A check of deed records shows that that transaction did not in fact take place, but it provides evidence that Frances Howe was beginning to think about how the property would be used after her death.

1909, Oct 7 Letter written by Frances R. Howe tells of early days of Westchester Township.[172]

1915, June 17 DAR (Daughters of the American Revolution) members are given permission by Frances R. Howe to go through the Bailly Homestead.[173]

1916, Feb. 17 Under a law that permits land owners to register a farm name, Frances R. Howe registers farmstead as "Bailly Mission Homestead."[174]

1916, Oct 5 Centennial celebration of Indiana. Miss [Frances R.] Howe did not participate.[175]

1916, Oct 19 Newspaper article notes that the patent conveying 120 acres from the United States to Joseph Bailly was recorded. "The patent shows that Mr. Bailly bought his land at the La Porte land sale on March 20, 1837."[176] This may be a typo, since Joseph Bailly died in 1835, but it is also possible that the paperwork was simply processed after his death.)

1917, Jan 20 Bailly's granddaughter, Frances R. Howe, dies. She was the last of the family to occupy the homestead.[177] She died in Los Angeles, at home of her adopted daughter, Mrs. Houston (Emma Bachman).[178]

1918, Feb 7 Funeral services for Frances R. Howe. (Actual date of the burial in the family cemetery was Jan. 24, 1918 according to Margaret Larson.)[179]

1918, May 9 Contents of the buildings at the Bailly homestead items were sold at auction.[180] A few personal items were retained by Emma Bachman Huston, including a set of tiles that were supposed to have been installed on a fireplace in the main house. The tiles were given to Mrs. P. G. Larson, who passed them down to her daughter, Margaret Larson. Margaret Larson donated them to the park in 1992 (Appendix A.) An article published in the Chesterton Tribune about the auction noted that the auction had been legally mandated even though the estate had

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[171] "*Chesterton Tribune* Articles List, Bailly Homestead," Bailly file WTHM.
[172] "*Chesterton Tribune* Articles List, Bailly Homestead," Bailly file WTHM.
[173] "*Chesterton Tribune* Articles List, Bailly Homestead," Bailly file WTHM.
[174] "*Chesterton Tribune* Articles List, Bailly Homestead," Bailly file WTHM.
[175] "*Chesterton Tribune* Articles List, Bailly Homestead," Bailly file WTHM.
[176] "*Chesterton Tribune* Articles List, Bailly Homestead," Bailly file WTHM.
[177] Sullivan, "Historic Site Survey, The Bailly Homestead, Porter County, Indiana," 1958, II.10.
[178] Jan 25, 1917, "*Chesterton Tribune* Articles List, Bailly Homestead," WTHM.
[179] "*Chesterton Tribune A*rticles List, Bailly Homestead," Bailly file WTHM.
[180] "*Chesterton Tribune* Articles List, Bailly Homestead," Bailly file WTHM; "An Account of the Sale of the Personal Property Belonging to the Estate of Frances R. Howe," May 4, 1918, Bailly Homestead Vertical File, Indiana Dunes National Lakeshore Archives (Hereafter cited as Bailly Vertical File INDU Archives).

enough assets to pay outstanding debts, and that Mrs. Huston was trying to keep the land holdings intact. It may be that her adoption was not considered legally binding.[181] The house was vacated after the auction and appears to have sat empty until 1919.

[181] Chesterton Tribune, ca. 1918, clipping, Bailly Vertical File INDU Archives.

1918 Landscape Description

This section describes the known characteristics of the landscape of the Bailly Homestead in 1918. The narrative is organized by landscape characteristics associated with the Bailly Homestead with a primary focus on domestic vegetation due to the rich documentation of this aspect of the site.[182] The drawing "Historic Period Plan: 1918 Landscape" depicts the cultural landscape at the end of the Period of Significance (*Plan found after this section*). The drawing relies on the study of ca. 1918 landscape features documented in photographs taken during the ca.1890s and 1924.[183] Also, oral history interviews conducted with Margaret Larson were consulted.[184] Margaret Larson resided at the Bailly Homestead from 1907 to 1911 and later described site vegetation and other aspects of the landscape in detail.[185]

Natural Systems and Features

The Little Calumet River is the primary natural feature that relates to the Bailly Homestead in 1918. The Bailly family established a boat landing southwest of the Brick House on the navigable waterway. Note: Woodlands relating to the Bailly Homestead are discussed below, under the subheading Vegetation.

Topography

The Bailly Homestead was established on the 70-foot high embankment above the Little Calumet River. This site provided safety from flooding and a vantage point from the primary dwelling area over the river and main public roadway, Howe Road.

Spatial Organization and Land Use

Although archival sources do not clearly describe the spatial organization and precise arrangement of features at the Bailly Homestead in 1918, documentation provides enough information to understand the general organization of the landscape. The relatively straight Entry Drive from the public road provided a spine along which the buildings and outbuildings were arranged. These structures were located on a plateau at the top of the densely wooded banks of the East Arm of the Little Calumet River. Around the buildings and drive, walks provided functional connections between structures and around gardens and scattered trees that occupied the generally open plateau of the Homestead.

Based on general setting and site configuration, it is likely that the principal organizing features remained consistent despite land use changes during the Period of Significance from 1822 to

[182] Robert R. Page, Cathy A Gilbert, and Susan A. Dolan, *A Guide to Cultural Landscape Reports: Contents, Process, and Techniques* (Washington, DC: United States Department of the Interior, National Park Service, Cultural Resource Stewardship and Partnerships, Park Historic Structures and Cultural Landscapes Program, 1998), 53.
[183] Photo Set, ca. 1890, INDU Museum Collection and the Porter County Historical Society; Photo Set, August 1924, "A French Homestead in The Old Northwest," INDU Archives.
[184] Oral History Interviews with Margaret Larson, Bailly Homestead, 1972 and 1986, INDU Archives.
[185] Margaret Larson, interview with Darryl Blink, 15 August 1986.

1918. Firsthand accounts as early as 1834 attest to the picturesque alignment of weathered, wooden structures within view of the river.[186]

Site functions and land use evolved to support the family's attenuating involvement with the fur trade as well as household and livelihood affairs in the beginning of the period of significance. Between Joseph Bailly's death in 1834 and 1850s, the family relocated and the forests were logged for timber.[187] Temporary occupancy by lumbermen, American Indians, and other visitors shifted back to permanent residency in the 1850s. Although logging continued, the return to permanent domicile by Bailly descendants did not mirror prior land uses. The five Bailly and Howe women (and one domestic servant) that resided at the Homestead spanned three generations. Tenant farming occurred north of the Homestead core to support the household. While sustenance and locomotion required basic infrastructure common to rural households of the time, Ms. Howe did not refer to her estate as a working "farm" and likely shaped the landscape accordingly, emphasizing ornamental plants, until her death in 1917.[188]

Views

Historic photographs from ca. 1890s and 1924 indicate the persistence of particular visual relationships including views along the Entry Drive and views out from the Homestead complex toward the bridge, Howe Road, and the river floodplain. Views along the Entry Drive begin at the Howe Road intersection and continue along the allée through the site. The west entrance to the Main House is highlighted by the brick walk that extends to the Entry Drive. Views from the east patio of the Main House reveal the porch and east entrance of the building.

Vegetation

In 1918, vegetation of the Homestead included surrounding woodlands, individual free-standing trees in the core of the site, gardens, and a ground plane of turf.

Mixed age stands of oak-hickory and beech-maple forest communities consisted of younger and smaller trees with varying degrees of regeneration. Few trees desirable for timber would be older than 80 years due to extensive logging and subsequent farming of the area around the 1850s.[189] Forest tree species common in the vicinity around 1918 likely included red maple (*Acer rubrum*), sugar maple (*Acer saccharum*), shagbark hickory (*Carya ovata*), American beech (*Fagus americana*), white ash (*Fraxinus americana*), black walnut (*Juglans nigra*), black cherry (*Prunus serotina*), white oak (*Quercus alba*), northern red oak (*Quercus rubra*), pin oak (*Quercus palustris*), black oak (*Quercus velutina*), American basswood (*Tilia americana*), slippery elm (*Ulmus rubra*), American elm (*Ulmus americana*). The Bailly family would have used these native trees for construction materials as well as products like poles, handles, and crates.[190]

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[186] Bowers, *The Old Bailly Homestead*, 8.
[187] Pfanz and Jones, Bailly Homestead HSR, 1972, p.8.
[188] Pfanz and Jones, Bailly Homestead HSR, 1972, p.9.
[189] An 80 year old tree in 1918 assumes that the tree would be sufficiently small (less than 20 years old) to have avoided being harvested in 1855, a mid-point of a decade known for logging of the area.
[190] Burton V. Barnes and Warren H. Wagner, Jr., Michigan Trees: A Guide to the Trees of Michigan and the Great Lakes Region, Ann Arbor: University of Michigan Press, 1981.

The homestead contained several individual trees in 1918. While some derive from natural regeneration, others were planted for fruit or for specific reasons by the Bailly family. Of the known trees, a large elm, likely an American elm (*Ulmus americana*), spread a large canopy between the Chapel and the Two-Story Log Building. An American linden (*Tilia americana*) was planted near the Brick House. Wild crabapple trees (*Malus sp.*) grew along the edge of the wooded slope east and south of the buildings.[191] Joseph Bailly's family planted an ash (*Fraxinus* sp.) in an unknown location on the high, flat ground of the Homestead sometime after 1822.[192] The tree commemorated the location where the family camped after the inundation of their first cabin on the river floodplain. The Entry Drive was lined with a variety of deciduous trees to create an allée beginning in the mid-to-late 1800s.[193] These trees were limbed over 20 feet above the ground and tightly planted at a distance of 8 to 15 feet along the beginning of the sloped drive. On the plateau through the core of the Homestead, the trees were planted approximately 20 feet apart directly across from each other. Early twentieth century photographs indicate the presence of mature maple and elm and other unidentified deciduous trees in the allée."

Commemorative trees were also planted near the river. On the day of their wedding in 1841, Rose Bailly and Francis Howe planted intertwined "wedding trees" beside the river and marked them with a metal plaque that persisted into the 1930s.[194] An elm (*Ulmus* sp.) symbolized Frances and an oak (*Quercus* sp.) represented Rose.

Also on the riverbank, an oak, sprouted from an acorn brought from Louisiana in the late 1800s, grew in an unidentified location likely south of the house.[195] While Ms. Howe referred to it as a "live oak," *Quercus virginiana* would not have survived an Indiana winter. Of the 19 oaks common to Louisiana, only seven are hardy on the south Lake Michigan shoreline and only the willow oak (*Quercus phellos*) has leaves that resemble those of the live oak.[196] Wild crabapples and roses (*Rosa* sp.) also grew along the riverbank.

In 1918, the Bailly Homestead also contained fruit trees planted by both Joseph Bailly and his son-in-law Whistler.[197] Known varieties included peach, apple, cherry, plum, and mulberry. While an orchard pertaining to the farm existed about 250 feet northeast of the Homestead, the family also planted fruit trees within the core In 1918, the Bailly Homestead also contained fruit trees planted by both Joseph Bailly and his son-in-law Whistler.[1] Known varieties included peach, apple, cherry, plum, and mulberry. While an orchard pertaining to the farm existed about 250 feet northeast of the Homestead, the family also planted fruit trees within the core including

[191] Howe, 1907, p.42, cf. Pfanz and Jones, Bailly Homestead HSR, 1972, p.10.
[192] Howe, 1907, p.43, cf. Pfanz and Jones, Bailly Homestead HSR, 1972, p.11.
[193] Fireplace Tiles, ca. 1900, depict the artist's impression of the early Bailly Homestead without a tree lined drive.
[194] Howe, 1907, p.136, and La Roche Interview, 6 June 1972, cf. Pfanz and Jones, Bailly Homestead HSR, 1972, p.11.
[195] Howe, 1907, p.93, cf. Pfanz and Jones, Bailly Homestead HSR, 1972, p.11.
[196] Richard Keim, "Louisiana Plant Identification," *Louisiana State University School of Renewable Natural Resources*, website accessed: 31 May 2017, http://www.rnr.lsu.edu/plantid/listscientific.htm#sci_Q.
[197] Howe, 1907, p.42, cf. Pfanz and Jones, Bailly Homestead HSR, 1972, p.10.

two cherry (Prunus sp.) trees along the north side of the Main House and at least one apple (Malus pumila) tree west of the Chapel (Figure 2.14).

Whistler also planted shrubs prior to 1850.[198] These likely predated the addition of plants visible in historic photographs including bridal wreath spirea (*Spiraea* x *vanhouttei*) south of the conservatory, rows of northern white cedar (*Thuja occidentalis*) used for screening near the Main House, and American hazelnut (*Corylus americana*) at the corners of the Storehouse.

The attempt by Frances Howe to cultivate the impression of an estate rather than that of a working farm after 1891 was manifested in the abundance of ornamental gardens within the Homestead. Larson's oral histories and sketches provide specific details. Flower beds and flowering shrubs were established along paths and in visible locations near buildings and the brick walk between the Entry Drive and the Main House.[199] Beds along the brick walk were planted with grape hyacinth (*Muscari* sp.) and tulip (*Tulipa* sp.).[200] Small, round rock garden beds may have been placed in the lawn panels on either side of the brick walk by 1918. At least one tree west of the drive was also encircled by grape hyacinth. The paths from the Main House to the Brick House and the Chapel were lined with unspecified spring blooming bulbs and lily-of-the-valley (*Convallaria majalis*), respectively. The presence of lily-of-the-valley in a bed on the north side of the house and along the path suggests that this area was shaded by nearby canopy trees.

A rose garden was located south of the Main House and west of the Brick House.[201] Individual roses were also planted in other locations within the site. Violets grew in the grass near the southwest corner of the Bailly House. Near the drive and north of the path to the Bailly House, a bed of dahlias (*Dahlia* sp.) and tiger lilies (*Lilium lancifolium,* or possibly Michigan lily [*Lilium michiganense*] or tiger daylily [Hemerocallis fulva]) provided summer blooms. A massing of white lilacs (*Syringa vulgaris* var. *alba*.) ran east from the bed and likely formed a partial screen between the north side of the Main House and the Two-Story Log Building. At the Chapel, a bed of tiger lilies marked the northwest corner and drifted along the north side. Purple lilacs (*syringa vulgaris*) were planted at the edge of the slope northwest of the Chapel.

Circulation

Historic circulation consists of vehicular drives and pedestrian walks. The tree-lined Entry Drive followed the course of the northern branch of the Sauk Trail (Figures 2.6 and 2.21).[202] Paved with what Frances Howe called "mignonette" or river gravel, the drive departed Howe Road near the bridge and proceeded north through the center of the Homestead's core.[203] The drive

[198] Howe, 1907, p.42, cf. Pfanz and Jones, Bailly Homestead HSR, 1972, p.10.
[199] Howe, 1907, p.42, cf. Pfanz and Jones, Bailly Homestead HSR, 1972, p.10.
[200] Margaret Larson, interview with Darryl Blink, 15 August 1986.
[201] Larson Interview, 12 June 1972, and, C.W. Nelson, "Miss Frances R. How and the Bailly Homestead as I Knew Them in 1904," Duneland Historical Society publication, January 1956, p.2, cf. Pfanz and Jones, Bailly Homestead HSR, 1972, p.10.
[202] Pfanz and Jones, Bailly Homestead HSR, 1972, p.10.
[203] Refer to hand drawing, oral history.

continued north toward the farm and then northwest to a tenant farmer residence, fields, and the Bailly Cemetery, and northeast toward the orchard and the Chellberg Farm.

In 1918, pedestrian circulation was largely associated with the Main House. The relocation of the Brick House and Chapel altered earlier circulation patterns that utilized wooden boardwalks. A brick walk, laid in 1904 and lined with planting beds, connected the entry drive with the west porch of the Main House.[204] A concrete walk connected the east patio of the Main House with the Laundry House to the south. A concrete walk also joined the Brick House to a set of steps halfway to the Entry Drive. Archeological evidence suggests that a brick walk may have extended to the Entry Drive from the steps.[205] Oral history suggests that gravel or earthen paths also connected the Main House to the Chapel and the front walk of the Brick House, and provided a connection between a boat landing at the river and the south side of the Brick House.

Buildings and Structures

By 1918, the Bailly Homestead contained three habitable buildings and at least eight support structures illustrated in approximate locations on the Historic Period Plan: 1918 Landscape.[206] In addition to the Main House, Brick House, and Two-Story Log Building, the outbuildings east of the Entry Drive included the Chapel, a Laundry Building, and a Windmill over a well. A chicken coop and an ice house existed in unidentified locations. The Storehouse and at least one stable were located west of the drive. A fence and wooden gate separated the domestic landscape from the working farm to the north. A house, barn, and other outbuildings associated with a tenant farmer were located in this area. Of the five historic structures, only the Main House did not change locations during the Period of Significance (Figure 2.4).

Small-Scale Features

The Bailly Homestead contained several small-scale features in 1918. Tools and other instruments related to the upkeep of the household were likely present in the landscape. Photographs show a clothesline, decorative fencing around beds near the east patio of the House, potted plants, and a ladder near an apple tree that was possibly used for picking fruit (Figure 2.14).

End of Episode I. Family Ownership.

[204] Howe, 1907, p.42, cf. Pfanz and Jones, Bailly Homestead HSR, 1972, p.10.
[205] Fredrick Limp, The Bailly Site: An Archaeological Study of an Early Historic Homestead in the Calumet, Glenn A. Black Laboratory, Indiana University, Bloomington, Indiana, Report on file, National Park Service, Midwest Archeological Center, (Lincoln, NE 1974).
[206] Larson Interview, 12 June 1972, cf. Pfanz and Jones, Bailly Homestead HSR, 1972, p.9.

CULTURAL LANDSCAPE AND HISTORIC STRUCTURES REPORT

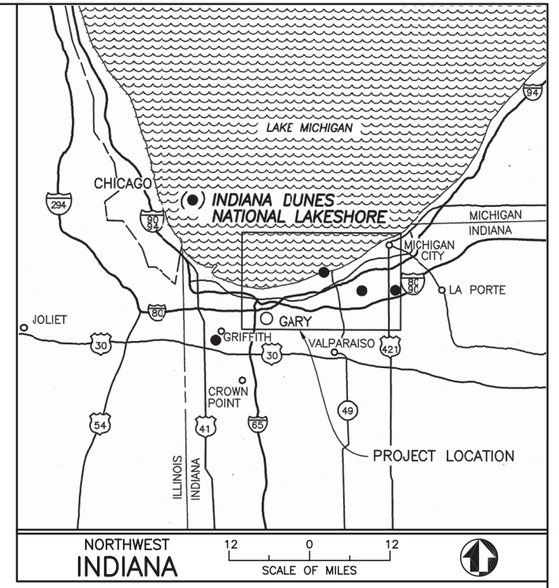
BAILLY HOMESTEAD

INDIANA DUNES NATIONAL LAKESHORE

CLR ANALYSIS DRAWINGS

PORTER, INDIANA





INDEX OF DRAWINGS

00 COVER

SITE AND BUILDING CHRONOLOGIES

HP1 1918 LANDSCAPE
HP2 1971 LANDSCAPE

LANDSCAPE CONDITION AND ANALYSIS

EL1 EXISTING LANDSCAPE
EL2 EXISTING LANDSCAPE CONTRIBUTING FEATURES
EL3 EXISTING LANDSCAPE TREE INVENTORY

CULTURAL LANDSCAPE AND HISTORIC STRUCTURES REPORT

UNITED STATES DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE
DENVER SERVICE CENTER

TITLE OF PROJECT
CLR ANALYSIS DRAWINGS

COVER

BAILLY HOMESTEAD
INDIANA DUNES NATIONAL LAKESHORE

REGION	COUNTY	STATE
MIDWEST	PORTER	INDIANA

DRAWING NO. 626 138628

PMIS/PKG NO. 20940

SHEET 1 OF 6

Fields and Farm Roads

Main Orchard

Barn Area

Possible Orchard

Drive Gate

Farm Gate

White Cedar Shrub Buffer

HS-21 Storehouse

Clapboard Building

HS-20 Two-Story Log Building

Windmill and Well

American Elm Tree

Lilac Hedge

Approximate location of Spring House

Boulder

HS-22 Chapel

White Cedar Hedge

HS-18 Main House

Apple Tree

Cherry Tree

Grape Vine

Cistern

Laundry Building

Howe Road

Entry Drive/ Sauk Trail

Brick Cistern

Cistern

Clothesline

Approximate location of Rose Garden

HS-19 Brick House

Wild roses and crabapples grew in the floodplain and along the riverbank.

The first Bailly family cabin was built near the riverbank and destroyed by flood in 1824.

Boat Landing

Little Calumet River - East Branch

Wedding Trees

Key

- Site Boundary
- Individual Tree
- Fruit Tree
- Woodland
- Planting Bed
- Shrub
- Lawn
- Farm Field
- Concrete Paving
- Gravel Paving
- Brick Paving
- Bare Earth Trail
- Building
- Approximate Spring House Location
- Wire Fence

Sources

1. Photo Set, ca. 1890
2. INDU Museum Collection and the Porter County Historical Society
3. Photo Set, August 1924, "A French Homestead in The Old Northwest," INDU Archives
4. Oral History Interviews with Margaret Larson, Bailly Homestead, 1972, INDU Archives.

Note: Building and fence locations and dimensions are approximate.

30 0 30 60 90 N

GRAPHIC SCALE - FEET, CONTOUR INTERVAL 5 FEET

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SUB SHEET NO. HP1

TITLE OF SHEET
CLR ANALYSIS DRAWINGS
1918 LANDSCAPE

BAILLY HOMESTEAD
INDIANA DUNES NATIONAL LAKESHORE
PORTER, INDIANA

DRAWING NO. INDU 626 138628
PMIS/PKG NO. 20940
SHEET 2 OF 6

Episode II: Private Ownership 1919-1971



Figure 2.19. Photo of the house taken ca. 1926, probably by John Bowers. Photo donated to Indiana Dunes by John Bowers in 1980. (Photographs, Accession #63. Museum Collection, Indiana Dunes National Lakeshore.)

Summary, Episode II.
In 1919, the homestead and 44.48 acres of land were deeded to the School Sisters of Notre Dame, a Catholic order of nuns who renamed it St. Joseph's Villa. The Sisters used the property sporadically until the early 1930s. During that time period, they made basic updates to the buildings, including the addition of electricity, and the installation of a furnace and at least one new bathroom to the house.

In 1937 the School Sisters of Notre Dame leased the homestead to Joseph and Alma La Roche, who made it their home. The La Roche's purchased the property from the Sisters in 1946 and retained ownership until the 1960s. During that time period, they added at least one house, and a number of smaller outbuildings to the property. They lived in the new house, which was located north of the Main House. (HS-18).

The La Roches put the property up for sale in 1958, spurring the launch of a local effort to raise funds to purchase the property and turn it into a public historic site. Those efforts were not successful, and in 1965 the property was sold to Joseph and Effie Rork. The Rorks converted the house to a restaurant, and constructed a large one-story addition to the east side of it to make room for a commercial kitchen. The restaurant was only open for a year and a half. The

house then served as an antique shop and later as rental property. In the late 1960s, the Rorks began having discussions with the National Park Service about selling the property, and in 1971 the 43.2 acre parcel and all buildings of the homestead became part of the Indiana Dunes National Lakeshore.

Some of the best sources of information about the property during this time period include a set of photos taken in August 1924 and compiled into a photo album titled "Some Remaining Views Around 'A French Homestead in The Old Northwest'," as well as a collection of picture postcards published in the 1930s. In 1958, the site was visited by NPS historian James Sullivan, who produced a comprehensive written report and took several photographs of the property, all of which are still on file with the National Park Service.

Episode II: Private Ownership 1919-1971

1919 — Louis G. and Cecelia Horn sell the Bailly homestead property to the Sisters of Notre Dame of Milwaukee, for $8,050. On Sept 23, 1919.[207] It is not clear what role the Horns played in the process. They may have purchased the land from Frances Howe's heir Emma Bachman, or simply been the executors of the Howe estate. No deed to them was found in Porter County records. The Chesterton Tribune reported in September that the "homestead has at last become the property of a religious order as originally intended by Miss Howe."[208]

The School Sisters of Sisters of Notre Dame renamed the property St. Joseph's Villa, and used it as a retreat center.[209] Although the List of Classified Structures entry says they probably added the cross to the brick house shortly after they bought it, notes on the back of historic photo #7 indicate the cross and other niches were part of the original construction (Appendix B, Photo #7).

1919, ca. — Gravity furnace added in this time period. Sullivan wrote in 1958 that the change was made between 1919 and 1946. It is likely that heat was added soon after the order acquired the property.[210]

1920, April 8 — *Chesterton Tribune* notes plans for a retreat for the Sister[s] of Notre Dame of Milwaukee at Bailly Homestead.[211]

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[207] Porter County Deed records, Book 80, p. 575.
[208] "*Chesterton Tribune* Articles List, Bailly Homestead," WTHM.
[209] Sister Frances Romana, SSND to J. R. Whitehouse, Supt Indiana Dunes National Lakeshore, Aug 20, 1970, 1, School Sisters of Notre Dame, Mankato, MN, Papers and Photographs regarding Bailly Homestead, a.k.a. Villa of St. Joseph, near Porter, Indiana, ca. 1919 to ca. 1946 (hereafter cited as SSND Bailly Homestead papers).; Sullivan, "Historic Site Survey, The Bailly Homestead, 1958, I.2.
[210] Walter, *Historic Structures Preservation Guide Bailly Homestead,* 1977, 6.3.
[211] "*Chesterton Tribune* Articles List, Bailly Homestead," WTHM.

1920 July, 27. Four sisters moved into the house to "prepare it for occupancy."[212]

1922, Dec. 14 *Chesterton Tribune* commemorates the 100th anniversary of Bailly's arrival.[213]



Figure 2.20. Photo of the bridge near the homestead, from the files of the School Sisters of Notre Dame. The following is written in pencil on the back of the photograph, presumably by one of the sisters in residence. "Our priest's three sisters on the bridge. All that woods is ours. The road to our house turns right back of girls – About a block uphill are our buildings." Note that contrary to local legend, the railings of this bridge were not repurposed from an early Ferris wheel; this is a common truss configuration. (Undated photo, SSND, Bailly Homestead papers.)

1922 A small book on the Baily family published by John O. Bowers, *The Old Bailly Homestead.* The book includes information about the history of the family and a short description of the homestead. He listed the following buildings:

- *the old house, "since remodeled and weather-boarded" (HS-18)*
- *an old log building that was used by Mr. Bailly in the fur trade (HS-21)*
- *the old chapel (HS-22)*
- *the old kitchen (possibly HS-20)*

[212] Sister Frances Romana, SSND to J. R. Whitehouse, Supt Indiana Dunes National Lakeshore, Aug 20, 1970, 1, SSND Bailly Homestead papers.
[213] "*Chesterton Tribune* Articles List, Bailly Homestead," WTHM.

Bowers also described the site “The setting still is one of the most attractive in the community, with its old tower white oaks, elms, maples and other trees that sheltered the wigwams of the Potawatomie’s in those primitive days,” and noted that the old mail route was set to become the “Dunes Highway.”[214] He later donated several photos and other items compiled for the book to the Indiana Dunes National Lakeshore.



Figure 2.21. Photo of the Sauk Trail, ca. 1926. Photo by John Bowers. A handwritten label on the back reads “The Old Sauk Indian Trail. This trail passes by the homestead;” it is signed by Bowers. Photo donated to Indiana Dunes by John Bowers in 1980. (Photographs, Accession #63. Museum Collection, Indiana Dunes National Lakeshore.)

1924, ca. Electricity and a second floor bathroom were added by this time. A photo of the front of the house that was taken before 1924 shows an electric light (Figure 2.22 below). Evidence of the bathroom construction comes from a large cast iron tub on the second floor of the house, which has labeling showing it was manufactured in May, 1924.

1924 Unknown photographer compiles at least two albums of photographs featuring the homestead. One is on file with the School Sisters of Notre Dame and one is part of the INDU Museum Collection, with the title “Some Remaining Views

[214] Bowers, *The Old Bailly Homestead*, 11.

Around 'A French Homestead in The Old Northwest' August 1924."[215] Photos show a skylight on the conservatory and a weatherboard railing and lattice on the first floor of the front (west) porch. The albums included images of all five present buildings, and one included the northwest corner of the early log building that was later used as a laundry house; see Figures 2.4, and 2.25. The laundry building is no longer extant.



Figure 2.22. Front, west wall of the house, 1924. Note the light fixture centered above the first floor porch and elctrical wires. The brick walk shown here was installed several years earlier for Frances Howe by C. W. Nelson's father, who recalled that he had to tear it up three time and relay it before she was satisfied. (1924 Album, INDU Museum Collection, and Nelson, "Miss Frances R. Howe and the Bailly Homestead As I Knew Them in 1904," Bailly Vertical File, WTHM, 2.)

1924 The 1924 Album of photos indicates that the Chapel was being re-chinked, and that it had undergone some changes. The flat infill above the door had been replaced by logs and there was a newer foundation. Many of those changes may have been done during Frances Howe's time.[216] (Figure 2.23) It is likely that interior improvements were made to the chapel at this time as well. (Figure 2.24)

[215] "Some Remaining Views Around 'A French Homestead in The Old Northwest' August 1924." Photo Album donated by Thomas Wagner in 1988, Collection #s 7083-7096, Indiana Dunes Museum Collection, Indiana Dunes National Lakeshore (Hereafter cited as 1924 Album, INDU Museum Collection).
[216] Chapel, 1924. 1924 Album, INDU Museum Collection.




Figure 2.23. Left: Photo of the chapel ca. 1890, before it was moved. Right: Photo of the Chapel in 1924. The chapel was being re-chinked when the photos was taken in 1924. (Left: 1890 Historic Numbered Photo Set, INDU Museum Collection; Appendix B. Right: 1924 Album, INDU Museum Collection.)





2.24. Left: Interior view of the chapel ca. 1890. Right: Interior view of the Chapel ca. 1930. The first view was taken before the apse was added ca. 1900. (Left: 1890 Historic Numbered Photo Set, INDU Museum Collection; Appendix B. Right: Postcard, ca. 1932, Bailly Homestead Postcard Collection, WTHM.)

1926 Construction of the Port of Indiana-Burns Waterway diverts the Little Calumet River and changes the direction of flow of from west to east and likely alters the boat landing southeast of the Brick House and the bank supporting the Wedding Tree at the Bailly Homestead.

1931, July 2 *Chesterton Tribune* reports that there are forty-one boys enrolled at Camp Villa Marie, a Catholic camp on the Howe farm.[217] This may have been the last camp held by the Sisters. It is assumed the campers stayed in tents on the grounds.

[217] "Chesterton Tribune Articles List, Bailly Homestead," WTHM.

1932 Sisters stop using the house and lease it to Mr. and Mrs. Hisey of Gary, Indiana. (First names not listed in the lease.)[218] The lease specified that the sisters would leave "the horse, one cow and all the fowls on the place." That document also noted that the log Chapel and all that is stored away in it are to remain as they are and nothing is to be removed from the chapel." The Hiseys moved in to serve as caretakers and stayed about one and a half years.



Figure 2.25. Photo of the house taken between 1919 and 1932, from the files of the School Sisters of Notre Dame. This photo shows the windmill with water tank (arrow) in the background, and the two-story laundry building, to the right of the house. The skylight is still on the conservatory. (SSND, Bailly Homestead papers.)

1932 Master's Thesis on the Fur Trade by a member of the School Sisters of Notre Dame includes some basic history and a few photos of the homestead. The photos appear to be from postcards published by Brooks and Chopek.[219] One photo shows a Craftsman style door on the chapel. (Visible in the 1939 photo in Figure 2.32.)[220]

[218] Contract 4 June, 1932, School Sisters of Notre Dame, Papers and Photographs regarding Bailly Homestead, ca. 1919 to ca. 1946; Clemensen, *Bailly Homestead Unit, Determination of Structures Composing the Bailly Homestead,* 1975, 7.
[219] Steve Shook, "Early Photographers of Porter County," accessed August 22, 2017, http://www.porterhistory.org/2017/04/early-photographers-of-porter-county.html.
[220] Kennedy, "The Pioneer Fur Traders of Northwestern Indiana," 4, Bailly Vertical File, WTHM.



Figure 2.26. Photo of the two-story log house taken between 1919 and 1932.
(SSND Bailly Homestead papers.)

1930s, ca. Photographers Brooks and Chopek publish a series of postcard images of buildings of the Bailly Homestead.[221]

[221] Steve Shook, "Early Photographers of Porter County," accessed August 22, 2017, http://www.porterhistory.org/2017/04/early-photographers-of-porter-county.html.



Figure 2.27. Trading Post ca. 1932. (Brooks and Chopek postcard image reprinted by Shook, “Early Photographers of Porter County”.)



Figure 2.28. Wedding Tree, ca. 1932. (Brooks and Chopek postcard image reprinted by Shook, “Early Photographers of Porter County”.)



Figure 2.29. House, ca. 1932. (Brooks and Chopek postcard image reprinted by Shook, “Early Photographers of Porter County”.)



Figure 2.30. Road in front of house, looking south, ca. 1932. (Brooks and Chopek postcard image reprinted by Shook, “Early Photographers of Porter County”.)

April 1933 John J. Martin and Mrs. John Martin begin leasing the property from the School Sisters of Notre Dame. They stay until May 1937.[222] Their son Jack Hisey was later interviewed by Charlotte Reed at the park. He recalled that the Sisters used the front bedroom in the second floor of the house as their chapel.[223]

1935, July 6 School Sisters of Notre Dame write to the Indiana Conservation Department offering the property to the State. First paragraph of the letter states, "The property is much too valuable to allow it to pass into the possession of a private owner who would be unable to appreciate the very features that would make it a worth-while acquisition to a Conservation Department."[224]

1937, April John J. and Margaret Martin prepare to file a mechanics lien against Sisters of Notre Dame for non-payment of bills for requested repairs to the buildings of the homestead.[225]

1937, May Property leased to Joseph S. La Roche for $40.00 per month, with possible option to purchase for $5,000.00 to the School Sisters of Notre Dame.[226] Contract for purchase was made ca. 1937.[227] La Roche added at least two small houses and other small buildings to the property over the next several years, and one of the newer houses became their home. His house was at the north end of the entry drive.

1938, Jan. Joseph La Roche is making payments to the School Sisters of Notre Dame for contracted agreement to purchase the property.[228]

1938, Sept. Letter from Mox G. Ruge, attorney at law, informed the School Sisters of Notre Dame that a fire on Labor Day of that year, had "destroyed a large portion of the dwelling on this real estate."[229] Reports of the damage were expected to exceed the $3,900.00 that the fire insurance policy provided, which the SSND

[222] John J. Martin Contract and "In the Porter Circuit Court April Term, 1938, No. 11427, SSND Bailly Homestead papers.
[223] Charlotte Reed Interview with Jack Hisey, Aug. 15, 1974, Transcript, Bailly Homestead Vertical File, Indiana Dunes National Lakeshore Archives (hereafter cited as INDU Archives), 3.
[224] Letter to Virgil Simmons from SSND, July 6, 1935, SSND Bailly Homestead papers.
[225] "Notice of Mechanic's Lien" and "In the Porter Circuit court April Term, 1938 Cause No. 11427, SSND Bailly Homestead papers.
[226] Letter to Sister Mary Agneta, SSND from Harold S. Phipps, Phipps and Fox Realtors, May 29, 1937, SSND Bailly Homestead papers.
[227] Letter to Sister Mary Agneta, SSND from Leo J. Clifford, attorney at law, July 19, 1940, SSND Bailly Homestead papers.
[228] Letter to Sister Mary Agneta, SSND from Harold S. Phipps, Phipps and Fox Realtors, January 27, 1938, SSND Bailly Homestead papers.
[229] Letter to SSND from Mox G. Ruge, Attorney at Law, September 12, 1938, SSND Bailly Homestead papers.

maintained, plus the remaining amount that La Roche owed under the contract to purchase.[230] This appears to be referring to the Main House (HS-18).[231]

1939 Description of the Bailly Homestead included in the *The Calumet Region Historical Guide* noted that the house (HS-19) was open for tours for 25 cents. The account listed the house, chapel, "servant's quarters," and "a unit of the old log trading post." It also mentioned the remains of a race track used to train horses located "at the rear of the estate" and described the wedding tree planted by Rose Bailly and Francis Howe when they married in 1841. The marriage tree was described as being located on the north bank of the river about 35 feet west of the bridge.[232]



Figure 2.31. La Roche House, summer 1972. This house built between 1962 and 1965 was demolished in the early 1970s. (Photograph # H-01-0155, INDU Museum Collection.)

[230] Letter to SSND from Mox G. Ruge, Attorney at Law, September 12, 1938, SSND Bailly Homestead papers.
[231] There is evidence of at least two different fires in the roof structure of the Main House. One in 1938 and the other in the 1960s.
[232] Workers of the Writer's Program, comp., *The Calumet Region Historical Guide,* Bailly file, WTHM.

1940 June 7 Newspaper article announces that sale of 70 acres formerly part of the Joseph Bailly property, located west of the homestead parcel, for use as a youth summer camp.[233]

1940 Litigations concerning property ownership and sale.[234] In letter dated Dec. 1, 1940 SSND state that they will continue to sell the property to Mr. La Roche.

1940, Fall Renewed interest from local and state historic preservation groups and the Indiana Dunes State Park Association to take over the SSND and La Roche property.[235] Letter dated Nov. 26, 1940 reported that La Roche had "torn out the altar and the pews from the little chapel."

1940, ca. The allée along the Entry Drive was partially replanted on the plateau with sugar maple (*Acer saccharum*) and red maple (*Acer rubrum*).[236] Wedding Tree struck by lightning, and at least one side of it may have been destroyed.[237]

1945 *Wolves Against the Moon,* by Julia Cooley Altrocchi, is published. The novel was a work of historical fiction, loosely based on the early life of Joseph Bailly.



Figure 2.32. Photo of the Chapel included in the 1939 WPA Guide to Indiana. The Craftsman style door shown here was probably added after the School Sisters of Notre Dame took over the property in 1919. (*The Calumet Region Historical Guide,* Bailly Vertical File, WTHM.)

[233] "Gary Camp at Baillytown," Newspaper clipping June, 27, 1940, SSND Bailly Homestead papers.
[234] Letters dated July 13, 1940, July 19, 1940, Aug. 31, 1940 and Quick Claim Deed dated Sept. 1940, SSND, Bailly Homestead papers.
[235] Letters dated Nov. 26, 1940, Dec. 1, 1940, Dec. 17, 1940, SSND, Bailly Homestead papers.
[236] Notes by Duane Lula dated 3 February 1977 document the vegetation at this time; Duane Lula, notes, on NPS, Site Plan and Interpretive Trails, Preliminary, Restore Exterior Bailly Homestead and Outbuildings, Dwg No. 626/25,000, Sheet 1, May 1975, 3 February 1977.
[237] "Fireplace Tiles 26-27," typescript by Margaret Larson, Catalogue #s 9658-9678, INDU Museum Collection; Appendix A.

1946, Aug. School Sisters of Notre Dame sell the homestead to Joseph S. and Alma M. La Roche.[238]

1947 Newspaper article about the homestead includes photos of the house and chapel. There was no lattice on the front porch of the house by that time.[239]

1947 Milan J. Morgan surveyed the Homestead property for Joseph La Roche. It included 43.2 acres.[240]

1955, Dec. Earl H. Reed made a brief inspection of the homestead interior and described it in writing.[241] He was advocating for public acquisition of the property.[242]

1957 Barn on the property destroyed by fire.[243] Chapel and Coachman's House (Two-story Log House HS-20) underwent major repairs.[244]

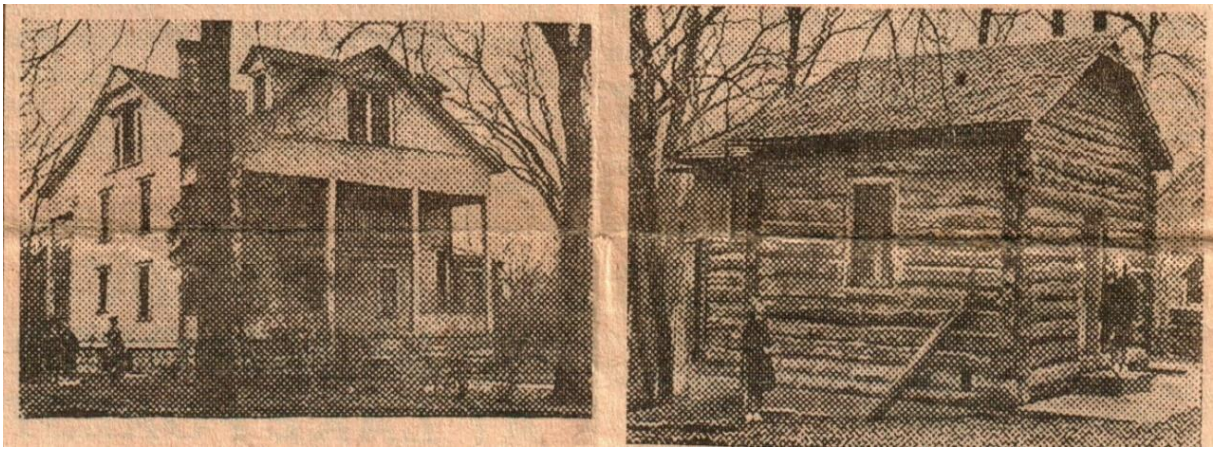


Figure 2.33. Photos of the house and chapel, 1947. "In Indiana Dunes and old Baillytown," *Chicago Sunday Tribune,* April 13, 1947, 1.6. (Bailly file WTHM.)

[238] Sullivan, "Historic Site Survey, The Bailly Homestead, Porter County, Indiana," 1958, I.2.
[239] In Indiana Dunes and old Baillytown," *Chicago Sunday Tribune,* April 13, 1947, 1.6, Bailly file WTHM.
[240] "Bailly Homestead: North of U.S. 20 at Little Calumet River, Chesterton, Indiana," Site Assessment Report, (U.S. Department of the Interior, National Park Service, Indiana Dunes National Lakeshore. ca. 1968), (Hereafter cited as INDU 103).
[241] Sullivan, "Historic Site Survey, The Bailly Homestead, Porter County, Indiana," 1958, V.4.
[242] "A Statement of the Bailly Homestead as given to the Indiana Pioneers." Typescript, Earl H. Harry Reed, FAIA, Chair, AIA Committee on Preservation of Historic Buildings, Chicago, 1972, Catalogue #4589, INDU Museum Collection.
[243] Sullivan, "Historic Site Survey, The Bailly Homestead, Porter County, Indiana," 1958, I.1.
[244] Sullivan, "Historic Site Survey, The Bailly Homestead, Porter County, Indiana," 1958, V.5.

1958 La Roches begin to talk about selling the property.

James R. Sullivan, Historian with NPS Region 5, conducted a detailed site study of the Bailly Homestead. The report included an analysis of significance in which he concluded that the property be considered for state or local importance rather than recognized for national significance. He noted that Leva Ritter had photos but would not share them as she was working on a book about the family. Ritter died in 1970, but never published the book.[245] Ritter's papers for the Bailly family are on file at the History Museum in South Bend, Indiana. Those files include numerous letters, typescripts and newspaper clippings, but no original photos of the property.[246]

At the time of Sullivan's visit in 1958, the homestead property included 33.73 acres in Section 27, and 9.34 acres in Section 34.[247] The site had electricity, water, and telephone service. Water was likely from a well.[248] Photos and a site plan drawn by Sullivan show that the windmill was gone by that time. It was therefore removed between 1919 and 1958.

[245] Sullivan, "Historic Site Survey, The Bailly Homestead, Porter County, Indiana," 1958; Leva Ritter, Ancestry.com.
[246] Ritter Collection on Joseph Bailly, History Museum, South Bend, IN.
[247] Sullivan, "Historic Site Survey, The Bailly Homestead, Porter County, Indiana," 1958, V.1.
[248] Sullivan, "Historic Site Survey, The Bailly Homestead, Porter County, Indiana," 1958, V.5.

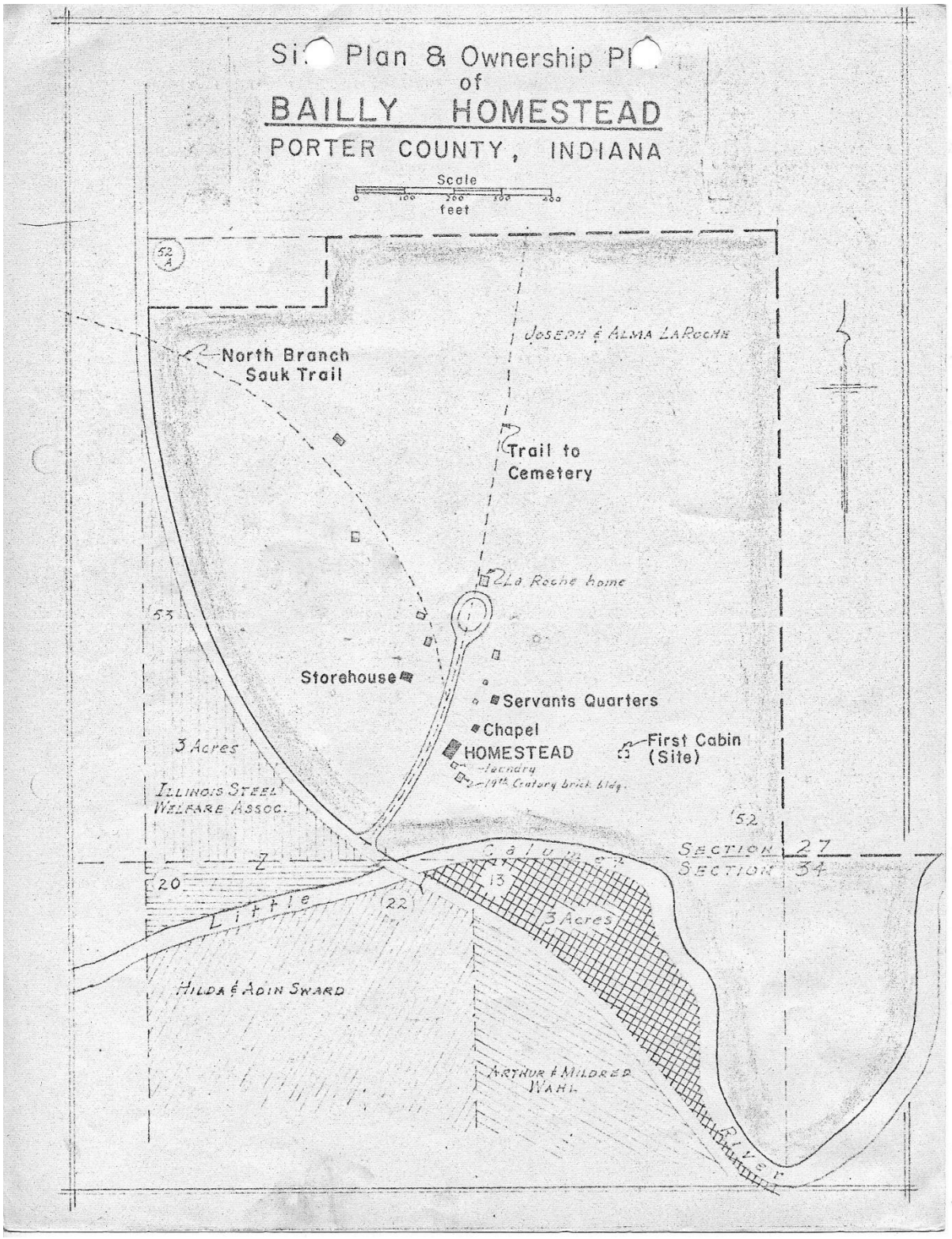


Figure 2.34. 1958 site plan showing the buildings on the homestead and the North Branch of Sauk Trail – map modified. (Sullivan, "Historic Site Survey, The Bailly Homestead, Porter County, Indiana," 1958. VII.)



Figure 2.35. Image #627. 1958. Photograph probably taken by Sullivan. Left to right, main house, laundry house (now demolished) brick house. (National Park Service, Denver Service Center, Technical Information Center, Photo Collection, Bailly Homestead, 1958.)



Figure 2.36. Image #628, 1958. Photograph probably taken by Sullivan. The white frame building to the left is the well house, which replaced the early windmill. (National Park Service, Denver Service Center, Technical Information Center, Photo Collection, Bailly Homestead, 1958.)



Figure 2.37. Image #624, 1958. Photograph probably taken by Sullivan. Looking north towards the La Roche house, the storehouse (HS-21) is on the far left. The other two buildings on the left were built during La Roche's tenure. (National Park Service, Denver Service Center, Technical Information Center, Photo Collection, Bailly Homestead, 1958.)



Figure 2.38. Image 617, 1958. View form the river. Photograph probably taken by Sullivan. (National Park Service, Denver Service Center, Technical Information Center, Photo Collection, Bailly Homestead, 1958.)

1958 Charles E. Shedd, Jr., National Park Service historic sites historian, surveyed the property and made an evaluation of significance.[249] He did not think it was nationally significant, but was worthy of becoming a state historic site.

1958 Growing interest from area historians in public acquisition of the property spurred a number of newspaper articles and correspondence from local groups to argue the case for significance and to encourage public acquisition. Among the more influential proponents for recognition of national significance was Earl Reed FAIA, of Chicago. Reed was the Chairman of the Committee on Preservation of Historic Buildings for the American Institute of Architects. Reed's papers on the Bailly Homestead are part of the INDU Museum Collection.[250] Reed's papers include an unsigned carbon copy of a letter to Senator William Jenner asking the senator to encourage the National Park Service to acquire the homestead. (The letter does not appear to have been written by Reed.) That letter included a note that they had also contacted Senator Capeheart, who apparently only made one enquiry for them.[251] Other interested parties mentioned in Reed's papers included Edward N. Wentworth.

1959 A 1959 aerial photograph reveals land cover and circulation in the vicinity of the Bailly Homestead.[252] Irregularly shaped fields, orchard blocks, and woodland in various stages of succession typify the rolling agricultural landscape north of the Homestead. Through this area, small farm roads followed field and orchard edges to link the Homestead to nearby farms such as the Chellberg Farm in the northeast. It is likely that small paths also existed beneath the forest canopy.

1960s, ca. Beams added to the living room by contractor John Pliske, fire damages front northwest corner of attic and roof.[253]

1962 Bailly Homestead becomes a National Historic Landmark.[254]

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[249] Charles E. Shedd, Jr., "The National Survey of Historic Sites and Buildings, Bailly Homestead, Porter County, Indiana," (U.S. Department of the Interior, National Park Service, Region Five, Philadelphia, PA, September 4, 1958), 11.

[250] Earl H. Reed Papers on the Bailly Homestead. Reed was the Chair of the AIA Committee on Preservation of Historic Buildings, Chicago. Catalogue #s 4467- 4568, INDU Museum Collection.

[251] Earl H. Reed Papers on the Bailly Homestead.

[252] Aerial Photograph, 1959, HistoricAerials.com, accessed 30 May 2017. Aerial coverage from 1961 and 1962 corroborates this land cover and circulation information.

[253] Walter, *Historic Structures Preservation Guide Bailly Homestead,* 1977, 6.4. This appears to be the second fire in the attic; the first occurred in 1938.

[254] Fay L. Hendry, "Bailly, Joseph, Homestead and Cemetery," (National Register of Historic Places, U.S. Department of the Interior, National Park Service, Jan. 6, 1978). The 1978 nomination form is stamped with the NHL listing date.

1962-1965 La Roches build a ranch house in the former farm area at the north terminus of the Entry Drive.[255]

1965, May 15 La Roches sell to Jos. E. and Effie M. Rork. The La Roches included a clause in the deed that said "It is understood and agreed between the parties that the Grantees shall keep and maintain all of the historical buildings located on the above described real estate in as near their original condition as possible."[256]

1965 Joseph and Effie B. Rork made it a restaurant. A large kitchen with concrete masonry unit (CMU) walls was added to the rear, and restrooms were added to the basement. The first floor of the west porch was enclosed and the balcony on the second floor was extended to span the full width of the porch. Most of that work was done by John Pliske, general contractor.[257] The restaurant was only open 1.5 years, then it became an antique shop. It later became a rental property.

1966 Indiana Dunes National Lakeshore created.[258]

1967 By 1967, the large American elm (*Ulmus americana*) located between the Chapel and the Two-Story Log Building died. The demise of this tree corresponds to the prevalence of Dutch Elm Disease in the Great Lakes during the 1960s.[259] The dead tree (snag) continues to be documented on maps of the site into the late 1970s.

1967-69 A large number of repairs, most of which were superficial, were made to the house by tenants Benjamin H. and Jennie Stewart. They wrote a letter to "Mr. Smith" describing what they had done.[260]

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[255] The ranch house, also known as the La Roche House, first appears in a 1967 aerial photograph after the sale of the property by the La Roche family. Aerial photographs 1959, 1961, 1962, 1967, Historicaerials.com, accessed 30 May 2017.
[256] Porter County Deed Records Book 209, p. 3. July 29, 1965, Bailly vertical file INDU Archives.
[257] Clemensen, *Bailly Homestead Unit, Determination of Structures Composing the Bailly Homestead,* 1975, 6.4.; Walter, *Historic Structures Preservation Guide Bailly Homestead,* 1977, 6.4
[258] "Indiana Dunes National Lakeshore History." *History & Culture*. Indiana Dunes National Lakeshore, National Park Service. Accessed Sept. 5, 2017. https://www.nps.gov/indu/learn/historyculture/index.htm.
[259] The comparison of aerial photographs from the 1960s shows the canopy of a large tree in this location although the canopy is not clearly evident on a 1967 aerial photograph; Aerial Photographs, 1962 and 1967, HistoricAerials.com, accessed 30 May 2017.Also see NPS, Bailly Homestead Building Layout," Dwg. No. 626/80005, Sheet 1, 12 August 1977.
[260] Walter, *Historic Structures Preservation Guide Bailly Homestead,* 1977, 6.4.



Figure 2.39. Placemat from the Bailly Homestead Inn restaurant. In spite of the word inn in the name, there is no indication that the business included lodging. Although the placemat featured the historic buildings of the homestead, much of the accompanying historical notes were inaccurate. (Bailly Vertical File INDU Archives.)

1968, July 29 Rorks began negotiations to sell to the National Park Service, 43.20 acres, dubbed TRACT 36-100, which included the Bailly Homestead. A review of the property that may be an appraisal, dated July 1968, notes that there were 11 buildings on the property at the time, and all were in need of repair. A sketch map included in the report indicates that the laundry house was gone by then (Figure 2.40).

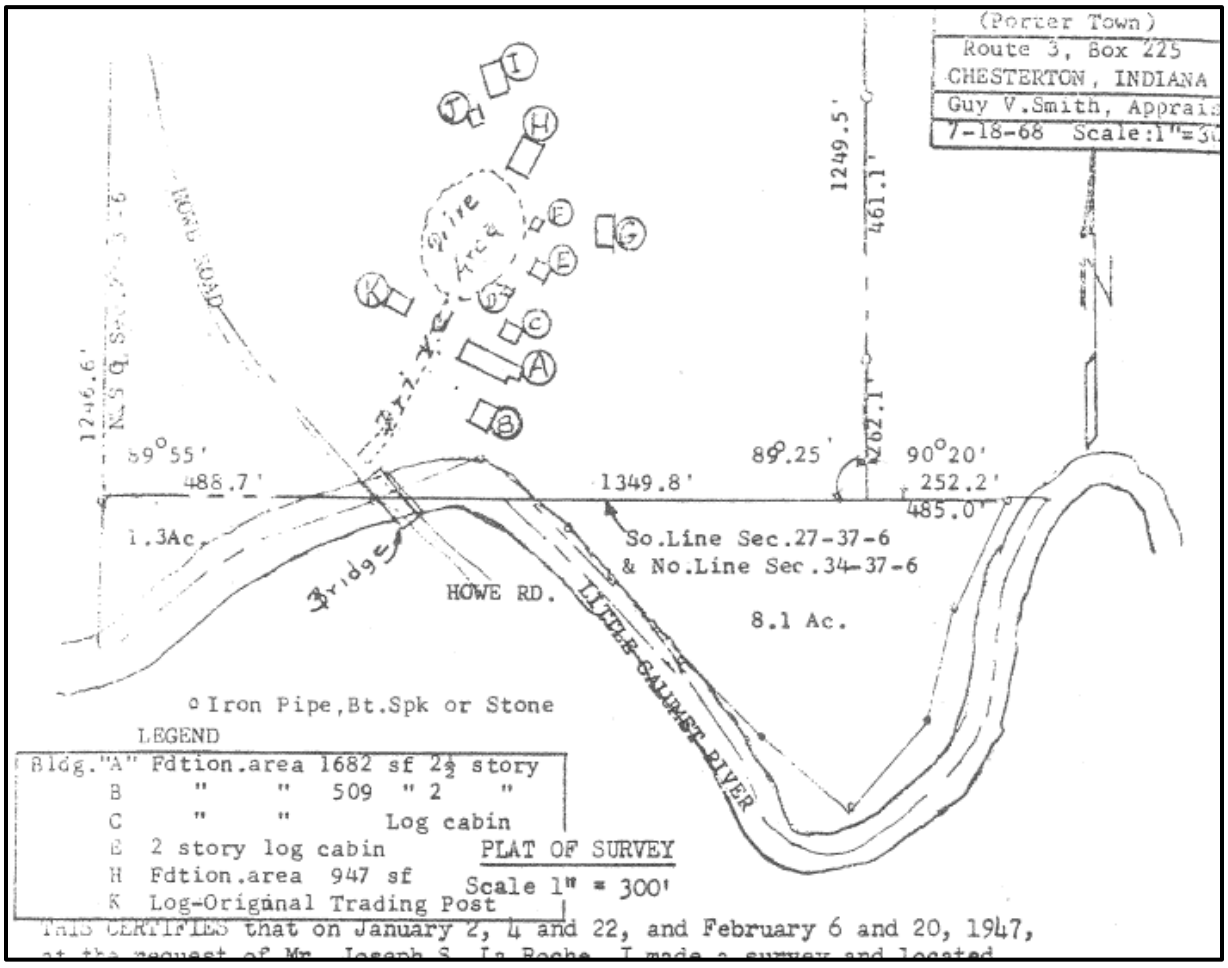


Figure 2.40. 1968 Map of Homestead. Note that the sketch is drawn on an older survey. ("Bailly Homestead: North of U.S. 20 at Little Calumet River, Chesterton, Indiana," ca. 1968, 3. Bailly Homestead Vertical File, INDU Archives.)

1968 43.2 acre tract with Homestead mapped by NPS.

1969 Homestead Inn declared bankruptcy in January.[261]

1971 Bailly homestead property purchased by National Park Service as a landholding within Indiana Dunes National Landmark (NL). They bought it from Joseph and Effie M. Rork.[262]

[261] Land Transfer documents, Bailly Vertical File INDU Archives.
[262] Land Transfer Documents, Bailly Vertical File, INDU Archives.



Figure 2.41. Photograph of the homestead taken after the front porch had been infilled for the restaurant use. This was probably taken about the time the National Park Service was considering purchase of the property. (Photograph #H-01-0222, INDU Museum Collection.)

1971 Landscape Description

This section describes the cultural landscape of the Bailly Homestead in 1971, at the end of its use as a private residence and commercial endeavor. The drawing "Historic Period Plan: 1971 Landscape" landscape features known to exist at this time (*Plan found after this section*). Documentation supporting the landscape description includes the study of ca. 1971 landscape features documented in photographic sets from 1958, a 1969 aerial photograph, and investigations of the property from the early 1970s.[263]

Natural Systems and Features

The Little Calumet River is the primary natural feature that relates to the Bailly Homestead in 1971. By this time, the Port of Indiana-Burns Waterway changed the course of the river from west to east. This would have altered the relationship between flow of water, flooding regimes, and the historic boat landing southeast of the Brick House.

Topography

The features of the Bailly Homestead remained concentrated on the 70-foot high plateau above the Little Calumet River. The increased number of buildings (such as the Kitchen and Laundry House) and intensive use along the eastern edge of the plateau likely caused erosion west of the Chapel, Main House, and Brick House.

Spatial Organization and Land Use

In 1971, the spatial organization of the Bailly Homestead reflected the persistence of significant landscape features as well as changes in land use. The linear Entry Drive and Allée and presence of buildings along the riverbank continued to provide a pattern to the landscape. Development of the site to accommodate automobiles and for use as private residence, restaurant, and antique shop, changed spatial organization between 1919 and 1971. Additional dwellings were built north and west of the historic core and several outbuildings were constructed on the eastern side of the site to support new uses.

Views

The presence of the site on the plateau above the Little Calumet River shaped appealing views over the valley and public road in 1971. The linear Entry Drive and Allée also set up views toward the historic buildings and new site amenities located parallel to the road.

Vegetation

Vegetation of the Bailly Homestead consisted of trees over lawn in the core of the domestic landscape surrounded by deciduous forest cover. The Homestead core contained a more open

[263] Photo Set from James R. Sullivan, "Historic Site Survey, The Bailly Homestead," NPS, April 1958; Aerial Photograph 7519_54, 12 March 1969, INDU Archives; Harry W. Pfanz and Russell Jones. Bailly Homestead Historic Structure Report, Historical and Architectural Data, INDU, Nov. 1972; Fredrick Limp, The Bailly Site: An Archaeological Study of an Early Historic Homestead in the Calumet, (Glenn A. Black Laboratory, Indiana University, Bloomington, Indiana), 1974; and NPS, Site Plan and Interpretive Trails, Preliminary, Restore Exterior Bailly Homestead and Outbuildings, Dwg. No. 626/25,000, Sheet 1, May 1975.

ground plane in 1971 compared to conditions a decade earlier when aerial photographs show a greater number of trees and a narrow cleared area between the drive and the buildings.[264] Photographs indicate several large, standing-dead trees. The large American elm (*Ulmus americana*) snag remained standing between the Chapel and the Two-Story Log Building at this time (Figures 2.31 and 2.41).

In 1971, the entry drive was lined with a mixed species allée containing many trees replanted around 1940.[265] A tight spacing of about 10 pairs of black locust (*Robinia pseudoacacia*) flanked the drive between the Howe Road intersection and the Brick House. The trees were about 20 inches in diameter-at-breast height (dbh). At least one butternut (*Junglans cinerea*) was included within this part of the allée. North along the Entry Drive about eight pairs of red maple (*Acer rubrum*) and sugar maple (*Acer saccharum*) were spaced approximately 22 feet apart and ended at the beginning of the farm area and Two-Story Log Building. A single American basswood (*Tilia americana*) marked the end of the drive slightly west of the alignment of the eastern row of maples.

Aside from the allée, relatively few plantings remained within the core of the domestic landscape in 1971. One apple tree remained north of the Main House and west of the Chapel and a mulberry tree of an undetermined age grew on the slope southeast of the Main House.[266] Two groups of unidentified deciduous shrubs grew parallel with the brick walk of the Main House and a massing of bridal wreath spiraea (*Spiraea* x *vanhouttei*) remained south of the Main House conservatory. One remnant pink rose bush was located in the location of Frances Howe's rose garden south of the Main House and west of the Brick House in 1971.[267] Few other shrubs or planting beds remained by the end of the period.

Circulation

In 1971, new circulation routes altered the pattern established by historic drives and walks. In particular, circulation features were created to accommodate automobiles. A new delivery route diverged from the Entry Drive immediately north of the Main House in order to access the 1965 Kitchen. The north-south Entry Drive was paved in asphalt in 1971. It continued past the core of the domestic landscape and branched in various directions within the former farm area to access a garage north of the Two-Story Log Building, the La Roche (ranch) House, and a second dwelling north of the Storehouse. By 1971, pedestrian circulation was simplified to include the brick walk to the Main House and a walk between the Entry Drive and the Brick House.

[264] Aerial photograph, 7519_54, 12 March 1969, INDU Archives.
[265] More precise location information for trees is shown on maps of the 1973 archeological excavations; Fredrick Limp, The Bailly Site: An Archaeological Study of an Early Historic Homestead in the Calumet (Bloomington, Indiana: Glenn A. Black Laboratory, Indiana University), 1974.
[266] NPS, Site Plan and Interpretive Trails, Preliminary, Restore Exterior Bailly Homestead and Outbuildings, Dwg No. 626/25,000, Sheet 1, May 1975, 3 February 1977.
[267] Pfanz and Jones, Bailly Homestead HSR, 1972, p.10.

Buildings and Structures

In 1971, the Bailly Homestead contained at least six buildings that pre-dated 1918 and at least eight other buildings. The Main House, Laundry House, Brick House, Chapel with new foundation, Two-Story Log Building, and Storehouse contributed to the historic character of the site (Figures 2.35 and 2.36). Newer support structures included a Kitchen outbuilding east of the Main House, a covered structure over the well north of the Chapel, a small outbuilding and a garage north of the Two-Story Log Building, and at least two other small outbuildings in the former farm area. Two ranch-style residences, the La Roche House and a second house north of the Storehouse were built off of the turn-around loop at the north end of the Entry Drive (Figure 2.37).

Small-Scale Features

In 1971, the Bailly Homestead was no longer used as a residence or for commercial operations; because of this, few small few small-scale features remained on site.

End Episode II. Private Ownership



Sources

1. Photo Set from James R. Sullivan, "Historic Site Survey, The Bailly Homestead," NPS, April 1958
2. Aerial Photograph 7519_54, 12 March 1969, INDU Archives
3. Harry W. Pfanz and Russell Jones. Bailly Homestead Historic Structure Report, Historical and Architectural Data, INDU, Nov. 1972
4. Fredrick Limp, The Bailly Site: An Archaeological Study of an Early Historic Homestead in the Calumet, (Glenn A. Black Laboratory, Indiana University, Bloomington, Indiana), 1974
5. NPS, Site Plan and Interpretive Trails, Preliminary, Restore Exterior Bailly Homestead and Outbuildings, Dwg No. 626/25,000, Sheet 1, May 1975.

Note: Building locations and dimensions are approximate.

30 0 30 60 90 N

GRAPHIC SCALE - FEET, CONTOUR INTERVAL 5 FEET

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SUB SHEET NO. HP2

TITLE OF SHEET
CLR ANALYSIS DRAWINGS
1971 LANDSCAPE

BAILLY HOMESTEAD
INDIANA DUNES NATIONAL LAKESHORE
PORTER, INDIANA

DRAWING NO. INDU 626 138628
PMIS/PKG NO. 20940
SHEET 3 OF 6

Episode III: Indiana Dunes National Lakeshore, 1971-2017



Restoration to begin in July

The Bailly Homestead is scheduled to have restoration begin in July by the National Park service, and would be ready for the public in late summer of 1973. The building appeared to have suffered some from its conversion into a restaurant and a succession of tenants including some squatters. The federal government has a condemnation suit pending to buy the 43 acre tract, which was declared a national historic landmark in 1963.

(Tribune photo)

Figure 2.42. Clipping of a 1972 newspaper article announcing the upcoming restoration of the homestead. (*Chesterton Tribune, Feb. 23, 1972, 3,* Bailly File WTHM.)

Summary, Episode III.
In 1971, the National Park Service purchased the homestead as part of a 43.2 acre parcel of land. Purchase of the property in 1971 was followed by a series of reports and studies. The studies included a Historic Structures Report by Harry Pfantz and Russell Jones titled, *Bailly Homestead Historic Structure Report, Historical and Architectural Data,* in 1972, and a report by A. Berle Clemensen titled *Bailly Homestead Unit, Indiana Dunes National Lakeshore, History, Maps, Evaluation of Historic Resources, Determination of Structures Composing the Bailly Homestead* in 1975.

Those studies and several others concluded that the best course of treatment for the homestead would be to restore it to its appearance at the end of Episode I, when it was still

under family ownership, as "the last home of Joseph Bailly and his direct descendants."[268] It was generally agreed that the homestead had seen too many changes since the time of Joseph and Marie Bailly's deaths to be accurately restored to what it might have looked like in the earlier years of family ownership. As Pfantz and Jones observed in 1972, "only two of the buildings can be directly connected with Joseph Bailly. The Bailly house, reported to enclose within its walls the log home he was building at the time of his death...the other is the Storehouse which is reported to be so altered…that it bears little resemblance to the original structure."[269]

A full scale rehabilitation and restoration project got underway in 1976 and the homestead was made accessible to the public later that same year. The homestead today occupies a 2.7 acre parcel that includes the house and the four surviving outbuildings, all of which reflect their appearance in 1919, at the end of Episode I. The site is currently open to the public, but the buildings are not.

The best sources of information about the buildings during this episode can be found in the files of the National Park Service and the Indiana Dunes National Lakeshore. They include a large collection of photos that were taken in the early 1970s by park staff and various contractors. One of the best written sources of information is a report prepared by Douglas Walter in 1977, *Historic Structures Preservation Guide Bailly Homestead*.[270] In addition to a full set of treatment guidelines, Walter's report includes extensive documentation of the recently completed restoration work, and a good timeline of other changes that took place before the National Park Service owned the property (Appendix C).

Episode III: 1971-2017

1972 Restoration architect Thomas Jones and historian Harry Pfantz visited the homestead. They interviewed Margaret Larson, who moved to the house with her parents in 1904 at the age of ten, and had good recall of what it was like then. She thought the historic photos were taken in 1894, and had a copy of the one on the back porch #7. She had the fireplace tiles as well. The notes of the interview include a great deal of detail about the house and grounds. They also met with John Pliske, a contractor who had worked on the house for previous owners.[271]

1972 Historic Structures Report prepared for buildings of the homestead by Harry Pfanz and Russell Jones. The description of the homestead history in that work appears to have been taken largely from Frances Howe's 1907 book. There is a

[268] Pfanz and Jones, *Bailly Homestead Historic Structure Report, Historical and Architectural Data,* 1972, 47.
[269] Pfanz and Jones, *Bailly Homestead Historic Structure Report, Historical and Architectural Data,* 1972, 47.
[270] Walter, *Historic Structures Preservation Guide Bailly Homestead,* 1977.
[271] Oral History Interviews, Margaret Larson, Bailly Homestead, 1972, INDU Archives.

good discussion of missing resources as well.[272] The scanned copy of the HSR has some photos, and there are others from that time period in the INDU archives, including a large set of interior views taken by Russell Jones.[273]



Figure 2.43. Photo taken June 1972 shows lower front porch enclosed and a solid roof on the conservatory. (Photographs INDU Museum Collection.)

[272] Pfanz and Jones, *Bailly Homestead Historic Structure Report, Historical and Architectural Data,* 1972, 2.
[273] "Jones Photographs," INDU Museum Collection.



Figure 2.44. Photo taken June 1972. (Photographs INDU Museum Collection.)



Figure 2.45. Chapel Interior, ca. 1972. Scan of a photo included in the 1972 Historic Structures Report. (Pfanz and Jones, *Bailly Homestead Historic Structures Report,* 1972, 75.)

1972 Temporary roofing and basic stabilization work was made to the house, by Pliske Construction.[274]

1973 Landscape design plans inspired by Larson's oral histories were drafted by the National Park Service but not implemented.[275]1974 National Park Service archeological study conducted.[276]

1974 Comprehensive Design Plan for the homestead and surrounding areas by Howard, Needles, Tammen and Bergendoff.[277]

1975 National Park Service prepares exterior restoration plans for all buildings on the homestead.[278]

1976 National Park Service does major restoration/reconstruction work on all five buildings now on the site and other landscape changes to the Bailly Homestead landscape (Appendixes C and D). The scope of work was extensive, especially for the log outbuildings. In many cases those only have a few original components left.[279] That project also included removal of later buildings, such as the La Roche House, agricultural outbuildings and a well house that had replaced the windmill in the mid-1900s. In 1976, asphalt was removed from the Entry Drive and circulation features were modified including the relaying of brick to the Main House and the addition of a concrete walk between the Brick House and east patio of the Main House.

[274] Walter, *Historic Structures Preservation Guide Bailly Homestead,* 1977, 6.4.
[275] Noward, Needles, Tammen, and Bergendoff, "Comprehensive Design Plan: Bailly Homestead," Dwg. No. 626/40,009, Sheet 24, Denver Service Center, National Park Service, 29 June 1973, rev. 19 October 1973.
[276] V. Fredrick Limp, "The Bailly Site: An Archaeological Study of an Early Historic Homestead in the Calumet," (National Park Service, Bailly Homestead, Indiana Dunes National Lakeshore Archives, Porter, IN, 1974).
[277] "Comprehensive Design Plan Bailly Homestead." Howard, Needles, Tammen and Bergendoff, 1974.
[278] "Restore Exterior Bailly Homestead and Outbuildings." National Park Service, Denver Service Center, August 1975.
[279] Walter, *Historic Structures Preservation Guide Bailly Homestead,* 1977, 6.4.



Figure 2.46. 1976 photo of the house under restoration. (Photographs, INDU Museum Collection.)



Figure 2.47. 1976 photo of the house under restoration. (Photographs, INDU Museum Collection.)

Work completed in 1976.

HS-18 House: Some of the exterior siding, and all of the stairs and porch materials were replaced with new materials to match, including cast stone balustrades on east porch. Structural upgrades were made throughout, and roof ridge from north to south was raised eight inches.

HS-19 Brick House: Substantial work on lower west brick wall and foundation, using matching historic bricks from elsewhere. Roof reconstructed, all new door and roof trim.

HS-20 Two-Story Log: Disassembled; retained and reused 3 rafters, chimney brick, fifteen logs and four sash. Rest is savaged or new.

HS-21 Storage Building: Six logs and one rafter pole retained and reused; rest is new material or salvaged logs.

HS-22 Chapel: "Interior was shored to save the internal shell." This may be referring to interior plaster which was still in place in 1972, but is now missing. Approximately 30% of logs, 3 roof rafters, and window sash were retained and reused. Round logs salvaged from other sites, extensive foundation repairs made.

Figure 2.48. Summary of work completed in 1976. (Walter, *Historic Structures Preservation Guide Bailly Homestead,* 1977, 6.1-6.4.)

1976 Individual Building Data Forms prepared for each building on the Homestead. Each includes a sketch floorplan.[280]

1977 Historic Structure Preservation Guide prepared for the Bailly Homestead, by Douglas S. Walter, NPS (Appendixes C and D). The document included a set of drawings that show what work was done (Figure 2.49). [281]

1978 National Historic Landmark file for Bailly Homestead and Cemetery updated with a National Register of Historic Places nomination. The nomination included several good clear photos that were taken after the 1976 restoration.[282]

[280] Individual Building Data, National Park Service. Bailly Homestead. Indiana Dunes National Lakeshore Maintenance Department, Porter, IN (hereafter cited as INDU MNT).
[281] Walter, *Historic Structures Preservation Guide Bailly Homestead,* 1977.
[282] Fay L. Hendry, "Bailly, Joseph, Homestead and Cemetery," (National Register of Historic Places, U.S. Department of the Interior, National Park Service, Jan, 6, 1978).

1978 Sarah Gibbard Cook and Robert S. Jackson prepare a study titled *The Bailly Area of Porter County, Indiana*.

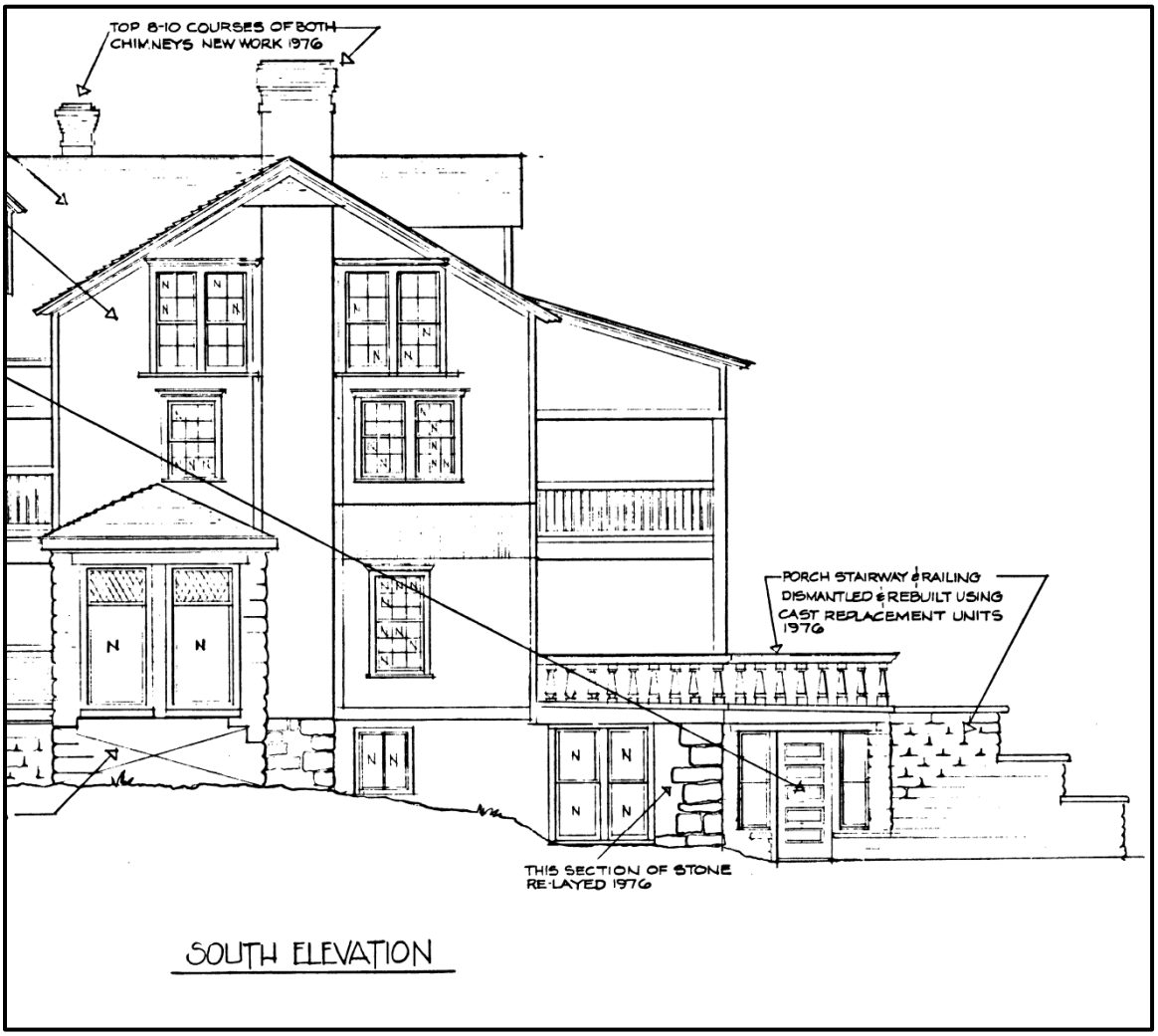


Figure 2.49. Detail from Douglas Walter, Drawing Sheet 3. (Walter, *Historic Structures Preservation Guide Bailly Homestead,* 1977, 2.)

1984 Maintenance Department prepares large color photos of each of the five buildings on the homestead. Copies are available at Individual Building Data, National Park Service. Bailly Homestead. Indiana Dunes National Lakeshore Maintenance Department, Porter, IN (Figure 2.50).

1988 Color Polaroids in park files include a few of the brick house.[283]

[283] Photographs, INDU Interpretive Department.

1992 Margaret Larson donates ca. 1900 fireplace tiles to the Indiana Dunes National Lakeshore.[284]

1997 Management Plan for the West Unit of the Indiana Dunes Lakeshore updated.

1997 Work done on the brick house (HS-19) included archaeological soil borings.[285]



Figure 2.50. HS-21, Storehouse, 1984. ("HS-21, Storehouse," Individual Building Data, National Park Service, Indiana Dunes National Lakeshore Maintenance Department, INDU MNT.)

1999 Paint Analysis done for the house, to guide a future painting project. It had been painted white in 1976. (NPS files.)

[284] Margaret Willis, "Preserved for decades: Bailly tiles have a story to tell," 13.
[285] "HS-19, Priest House," Individual Building Data, National Park Service, Indiana Dunes National Lakeshore Maintenance Department, INDU MNT.

2001-02	Porches, windows and siding repaired and house was repainted.[286]
2004	Wood sealed and pest control measures taken for most of the buildings, including borate treatment for chapel and two-story log house.[287]
2007	Brick House (HS-19) foundation stabilization project.
2010	Brick house (HS-19) partial foundation partially replaced with concrete block. Chapel (HS-22) received a new foundation and some new logs installed.
2012	Archeological investigations were conducted in 2012 as part of the Notre Dame / Indiana University Northwest field school.
2016	Westchester Township Historical Museum produces exhibit on The Bailly Women.[288]
2017	Work begins for a new combined Cultural Landscape/ Historic Structures Report.



Figure 2.51. Photos of house, probably taken soon after repainting. Left: Northwest front corner, right: south wall. (Photographs, INDU Museum Collection.)

[286] "Bailly Homestead Exterior Millwork, Siding and Window Preservation Project," Historic Structures Record of Treatment, (Indiana Dunes National Lakeshore, Porter, IN. Historic Preservation Training Center, Frederick, MD, Department of the Interior, National Park Service, 2001).
[287] "HS-20, 2 Story Log Cabin," Individual Building Data, INDU MNT.
[288] Joyce Russell, "New exhibit examines the role of Bailly women," *The Times* (Porter, IN), July 4, 2016, accessed June 1, 2017, http:/www.nwitimes.com/news/local/porter/new-exhibit-examines-the-role-of–bailly-women/ article_69fb0f42-10d0-5ead-b9aa-2f8c42c24246.html.



Ca. 1890 Photograph looking south along east elevation of Main House prior to the Brick House move.
(Historic Numbered Photo Set, INDU Museum Collection)

2 BUILDING CHRONOLOGIES

Building Chronologies

The Bailly Homestead is an iconic historic property in Porter County Indiana. Established by Joseph and Marie Bailly ca. 1822, it has long been recognized as one of the oldest homesteads in the area. A county history written in 1882 noted that “this interesting locality and the remarkable family which possessed it deserve more than a passing comment.” The Bailly Family held ownership until 1918, when the property was sold out of the family. Subsequent ownership resulted in many changes and usage of the property, until the NPS purchased the property in 1971. Several rehabilitation projects have been undertaken across the site and the buildings through the years. This section of the report is to document, through written histories and photographs, the chronology of changes made to the buildings. These chronologies assist in the understanding of the existing conditions and their current assessment for authenticity and condition. A site plan showing the development of the existing structures is found in Figure 2.4.



Figure 2.52. View of the homestead from the Little Calumet River, ca. 1958. (INDU Museum Collection, INDU 103, possibly Sullivan, ca. 1958)

Main House HS-18

Joseph died in 1835, and his widow and children moved away. The house had a finished exterior that included weatherboards, but most of the interior walls were whitewashed and left un-plastered for decades. The house was intermittently occupied by the oldest daughter of Joseph and Marie, Esther Bailly, and her husband John Whistler. The house was later occupied by Rose Bailly and her husband Frances Howe, the second daughter of Joseph and Marie. Marie returned to the homestead in 1843 for a brief period and did not return until 1852. Marie died in 1866, and in 1869 Rose Bailly Howe became the owner. Under the ownership of Rose, the oldest living daughter, the interior of the house was modernized, and the log kitchen was

rebuilt to serve as a private chapel. Rose later had the brick house constructed as an appendage to the Main House for her daughter Rose, who died in 1879. Her second daughter, Frances Rose Howe, was the last Bailly family member to owner the property. Around 1896, she undertook a large-scale construction program, including raising the house to construct a basement, and renovating interior and exterior elements to impart a more contemporary Late Victorian Eastlake styling to the house. Frances died in 1917, and the house was sold out of the Bailly Family. The house went through multiple owners, including the School Sisters of Notre Dame, and the La Roche and Rork families, with changes contemporary to each of the owners made to the house. It was used as a residence, a restaurant, an antique store, and later apartments. The homestead was eventually purchased by the National Park Service in 1971.

When the house was originally constructed ca. 1834, the first floor of the house was likely framed with logs, set over the earth on piers or a dry laid foundation. Early photographs of the house show the structure much closer to the ground than it lies today. While there are no known interior photographs, one photograph taken ca. 1890 shows the Bailly family women on the front porch with the door ajar (Figure 2.53). In this photograph, several important items are shown:

- The porch floor is constructed of wide boards that must have been deteriorating, as there appears to be a hold in the floor to the left of Rose Bailly Howe (seated on the far left).
- The original weatherboard siding is visible and has a very wide exposure with a dark wood base.
- There are adjustable louvered shutters on the front window.
- The shadow from the second floor porch shows that the porch was constrained between the front two center columns, as it is constructed today.
- The floor of the porch and the interior of the first floor appear to be almost flush with one another, save for a threshold at the door.
- The first floor on the interior is all one level from the front to the back.
- There appears to be a solid wall with a painted wood baseboard along the right (south) side of the interior hallway. There are items hanging on the wall, which give a light reflection. There may be a long runner carpet on the floor. There may also be a door opening (shadow) near the back of the hall.
- There must also be a left wall (north) wall, as the silhouette of something decorative (a mirror or clock) is hanging on the wall.
- The ceiling of the interior hallway appears to be boards. This agrees with other accounts of painted board ceilings in the house.
- Through the back door, the Brick House addition can be seen. To the left of the Brick House door is a niche. There were two niches to hold statues of Joseph and Mary. These niches and the Brick House can also be seen in other photographs taken from the ca. 1890 era.



Figure 2.53. Photograph of the front (west) porch before the major ca. 1900 renovation by Frances Howe. This photograph is of Rose Bailly Howe, Frances Rose Howe, and her niece Jenny Wicker. (H-01-0099, INDU Museum Collection, ca. 1890).

This photograph shows that prior to the ca. 1900 renovation by Frances Howe, the first floor was all one level. The remainder of the interior layout during this time was not documented and is therefore unknown. The existing first floor level changes are a result of the floor construction associated with raising the house to build the new basement. Based on this photograph, with the deteriorated front porch, it can be assumed that the first floor log structure was deteriorated due to the framing resting so close to the ground and a lack of ventilation. When the house was raised, the first floor log joists were replaced with dimensional sawn lumber and the house was rested on a new masonry foundation. At this time, the desire for a more formal first floor, with higher ceilings would have been able to be achieved, simply by lowering the first floor new framing. However, the front and back doors retained their original sills, and therefore the east and west entry foyers are raised above the rest of the house first finished floor.



Figure 2.54. Homestead Lane, ca. 1890. (H-01-0170, INDU Museum Collection)



Figure 2.55. Photograph, ca. 1890. (Historic Numbered Photo Set, INDU Museum Collection; Appendix B.)



Figure 2.56. Photograph, ca. 1890. (Historic Numbered Photo Set, INDU Museum Collection; Appendix B.)



Figure 2.57. Photo of the house taken between 1919 and 1932, from the files of the School Sisters of Notre Dame. This photo shows the windmill with water tank (arrow) in the background, and the two-story laundry building, to the right of the house. The skylight is still on the conservatory. (SSND, Bailly Homestead papers.)



Figure 2.58. View of the rusticated cast concrete block step walls, east porch, and chapel. (1924 Album, INDU Museum Collection, and Nelson, "Miss Frances R. Howe and the Bailly Homestead As I Knew Them in 1904," Bailly Vertical File, WTHM, 2.)



Figure 2.59. Photograph of the rusticated cast concrete block step walls, east porch, site walls, landscape, and the Laundry House to the left. (1924 Album, INDU Museum Collection, and Nelson, "Miss Frances R. Howe and the Bailly Homestead As I Knew Them in 1904," Bailly Vertical File, WTHM, 2.)



Figure 2.60. Photograph ca. 1924 showing the skylight at the conservatory. (1924 Album, INDU Museum Collection, and Nelson, “Miss Frances R. Howe and the Bailly Homestead As I Knew Them in 1904,” Bailly Vertical File, WTHM, 2.)



Figure 2.61. Photograph in 1924 showing the lattice infill with the pointed arch silhouettes. (1924 Album, INDU Museum Collection, and Nelson, “Miss Frances R. Howe and the Bailly Homestead As I Knew Them in 1904,” Bailly Vertical File, WTHM, 2.)



Figure 2.62. View of the south elevation ca. 1935. Note the porch is infilled with lattice, and the skylight is still installed at the conservatory. (H-01-0171, INDU Museum Collection, Bailly Vertical File, 1935.)

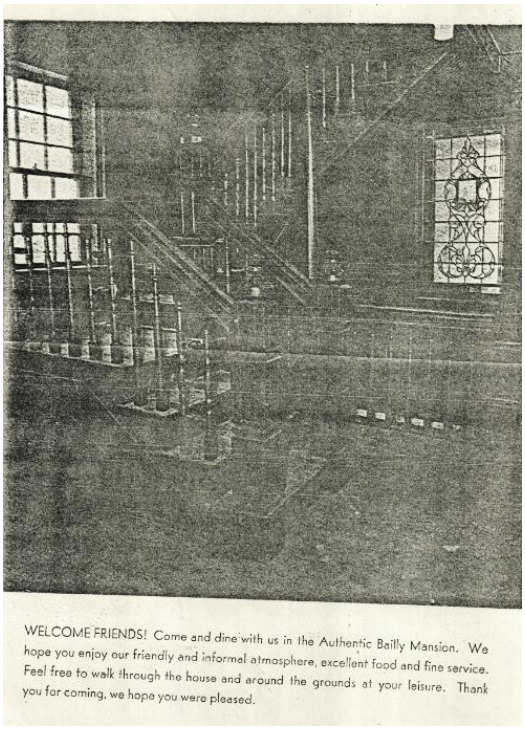


Figure 2.63. Advertisement for the Bailly Homestead Inn. Note the stained glass window in the east wall under the stairs that is now missing.
(INDU Museum, Bailly Vertical File, nd.)



Figure 2.64. View of the Bailly Homestead ca. 1960s. Note the porch is completely infilled. (H-01-0222, INDU Museum Collection, Bailly Vertical File, 1935.)



Figure 2.65. Parlor, ca. 1965. Note the beams in the parlor were installed prior to this photograph. The fireplace looks very much the same as it does today. Note that the wood-encased steel beams had been installed by this time.(INDU Museum Collection, Bailly Vertical File, 1965.)



Figure 2.66. Main House, ca. 1966. Note the red asphalt roofing. (Slide, INDU 2826-2843, 1966).



Figure 2.67. View of Dining Room fireplace, ca. 1970s. Note the pendant light fixture. (Dietrich Printers, Chesterton, IN, INDU Museum Collection, Bailly Vertical File, nd.)



Figure 2.68. House prior to the NPS 1970s rehabilitation. (H-01-0251, INDU Museum Collection, ca. 1970s.)



Figure 2.69. House prior to NPS 1970s rehabilitation. (H-01-0253, INDU Museum Collection, ca. 1970s.)



Figure 2.70. House prior to NPS 1970s rehabilitation. (H-01-0254, INDU Museum Collection, ca. 1970s.)



Figure 2.71. House prior to NPS 1970s rehabilitation. (H-01-0250, INDU Museum Collection, ca. 1970s.)



Figure 2.72. House before NPS 1970s rehabilitation. Note the kitchen addition in the northeast corner and the porches are infilled. (H-01-0196, INDU Museum Collection, 1977)

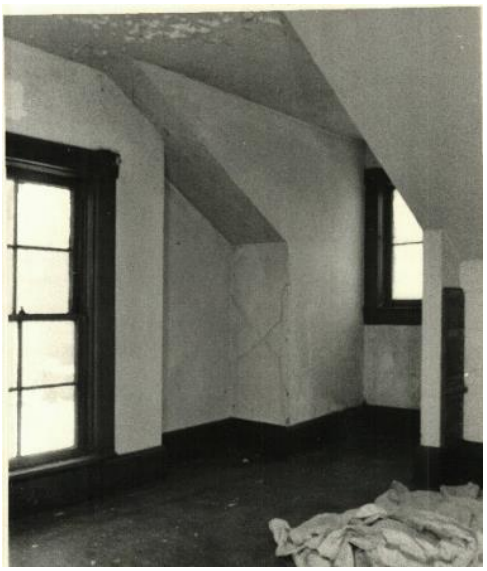


Figure 2.73. Main House, third floor west bedroom ca. 1970s (Bedroom 303) . (Imag0069 INDU).



Figure 2.74. Main House, third floor bathroom, ca. 1970s (Bedroom 301, looking into Bathroom 302). (Imag0073 INDU).



Figure 2.75. Main House, basement, ca. 1970s (Room 005, looking south). (Imag0089 INDU).



Figure 2.76. Main House, basement restroom, ca. 1970s (Basement Room 001 southwest corner, looking south). (Imag0072 INDU).

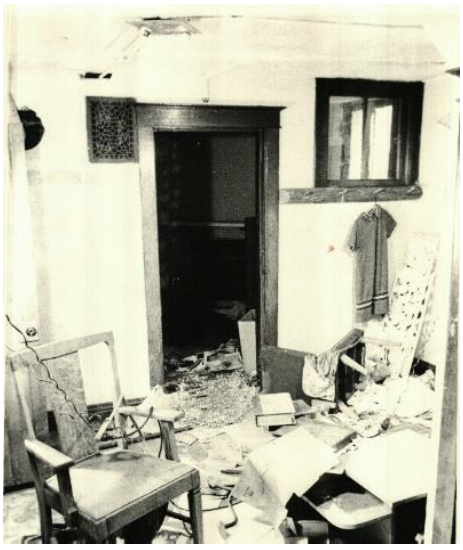


Figure 2.77. Main House Basement Room 001, looking west towards wall which has been removed. A faint outline of the fireplace can be seen through the door ca. 1970s. (Imag0091 INDU).



Figure 2.78. House during NPS 1970s rehabilitation. (H-01-0224, INDU Museum Collection, ca. 1976.)



Figure 2.79. House during NPS 1970s rehabilitation. (H-01-0208, INDU Museum Collection, ca. 1976.)

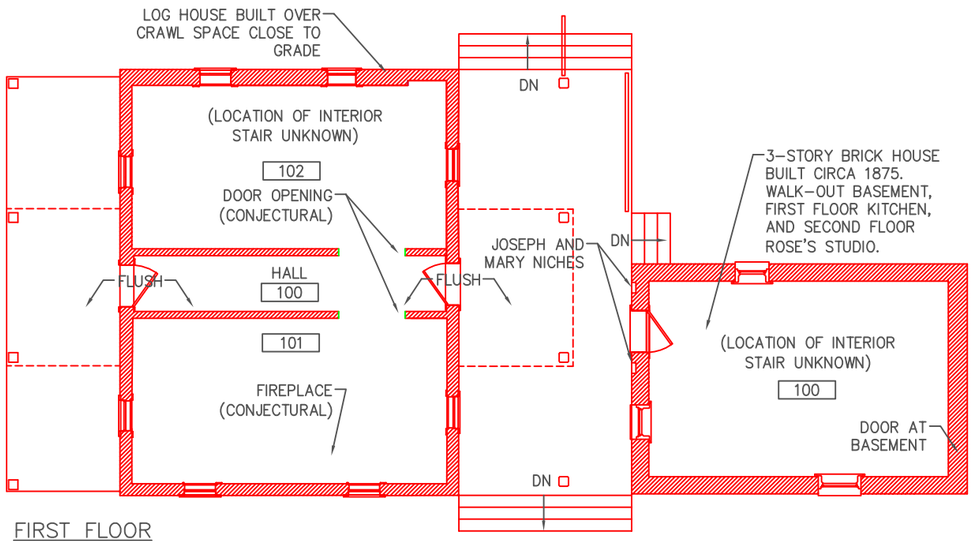


Figure 2.80. House during NPS 1970s rehabilitation. (L2^40, INDU Museum Collection, ca. 1976.)

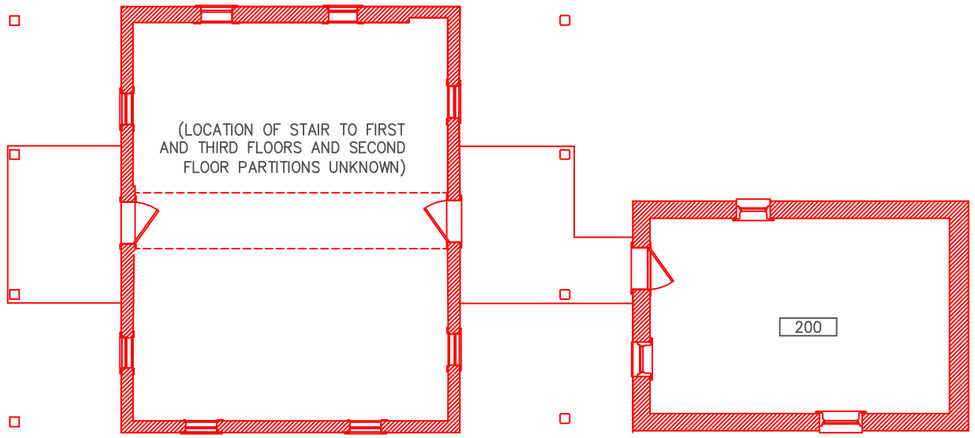


Figure 2.81. House during NPS 1970s rehabilitation – reconstruction of the east porch. (H-01-0210, INDU Museum Collection, ca. 1976.)

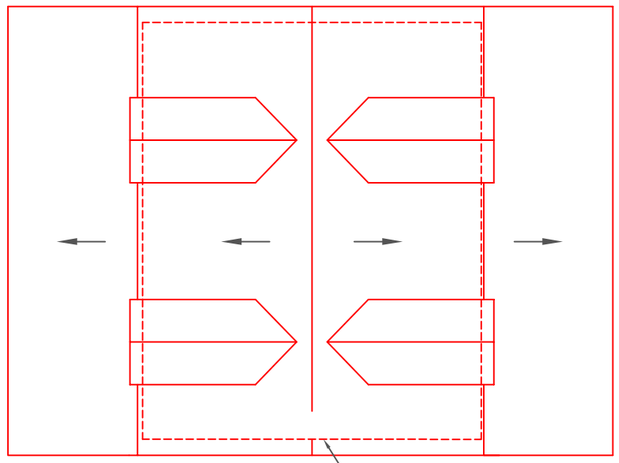
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FIRST FLOOR

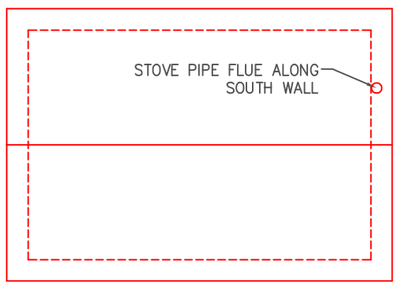


SECOND FLOOR



ROOF

CONJECTURAL CHIMNEY LOCATION. CIRCA 1890 PHOTOGRAPH SHOWS A WINDOW AT 3RD FLOOR.



✳ EPISODE IA: 1834–1890
BAILLY HOMESTEAD

EPISODE IB: 1897–1917
BAILLY HOMESTEAD

EPISODES II AND III: 1919–2017
BAILLY HOMESTEAD

LEGEND:

- NEW CONSTRUCTION
- EXISTING
- CONJECTURAL CONSTRUCTION

NOTES:

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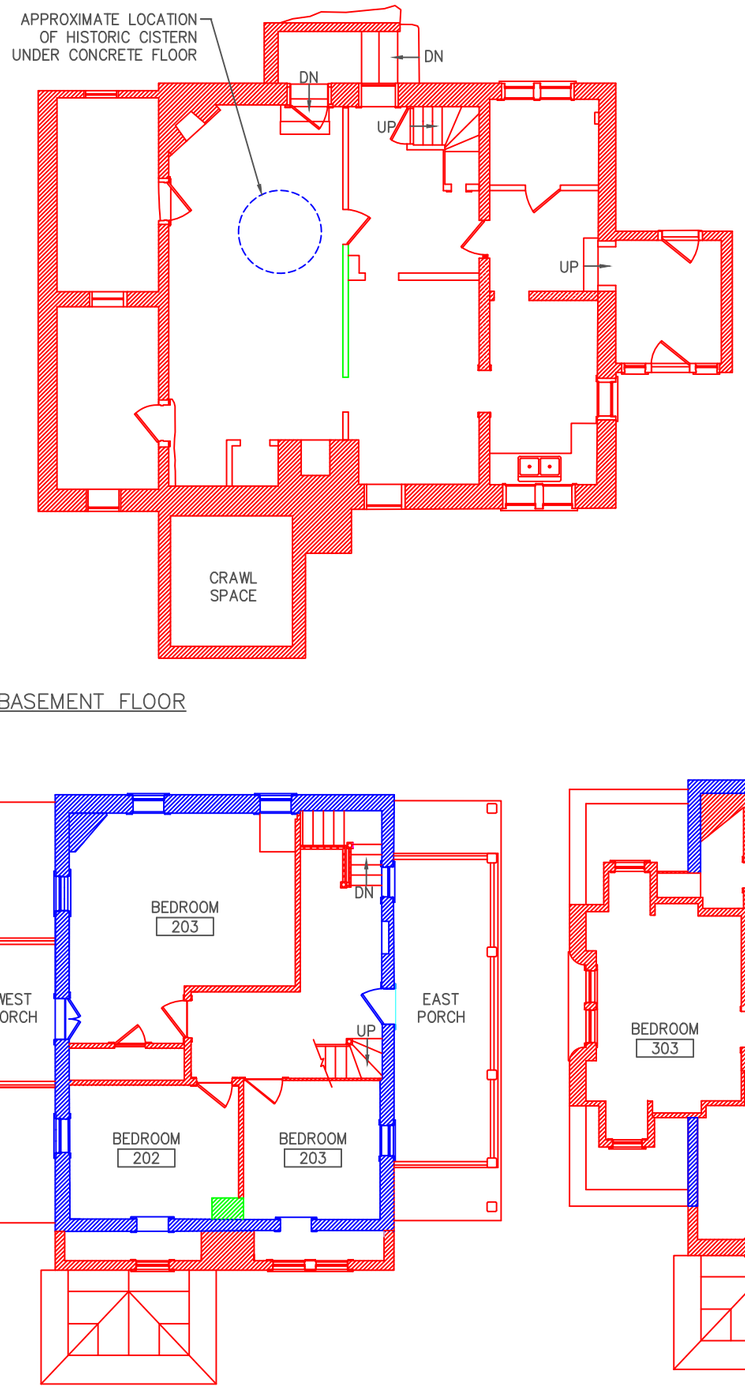
4. EPISODE II 1919–1971: THE PROPERTY WAS PRIVATELY OWNED THROUGHOUT THIS EPISODE. OWNERS INCLUDED THE SCHOOL SISTERS OF NOTRE DAME, JOSEPH S. AND ALMA LA ROCHE, AND JOSEPH E. AND EFFIE M. RORK.

5. EPISODE III 1971–2017: THE HOMESTEAD WAS PURCHASED BY THE NATIONAL PARK SERVICE. MAJOR REHABILITATION WORK WAS UNDERTAKEN IN THE MID–1970S.

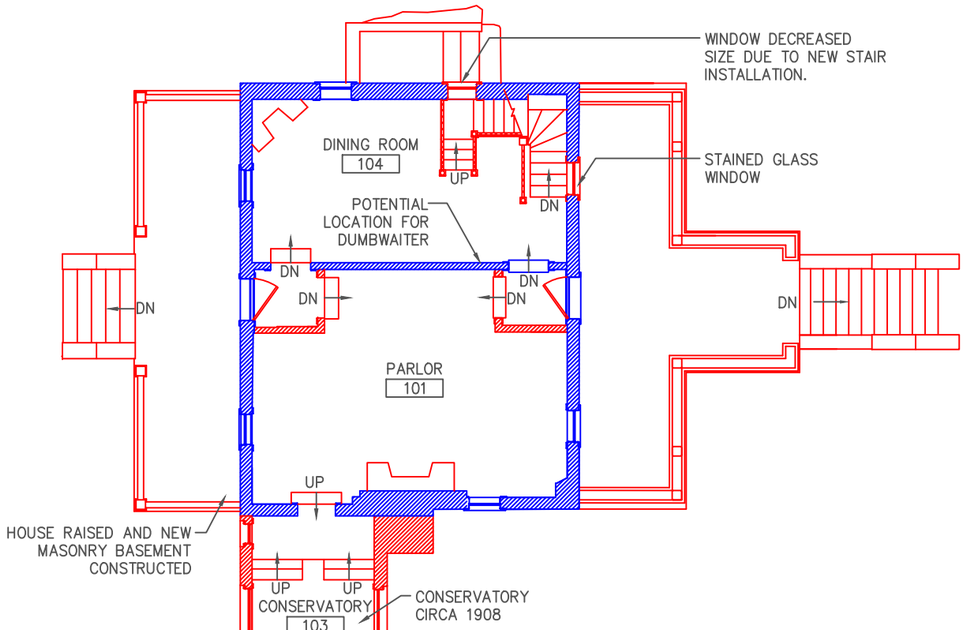
BAILLY HOMESTEAD
CHRONOLOGY DRAWINGS

HISTORIC STRUCTURE REPORT &
CULTURAL LANDSCAPE REPORT

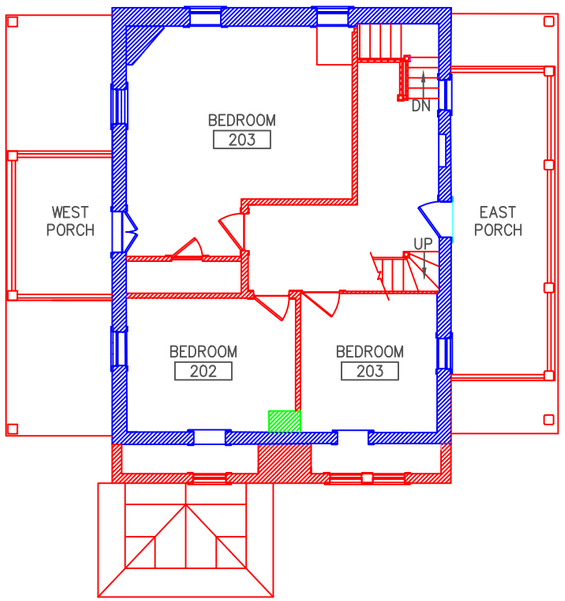
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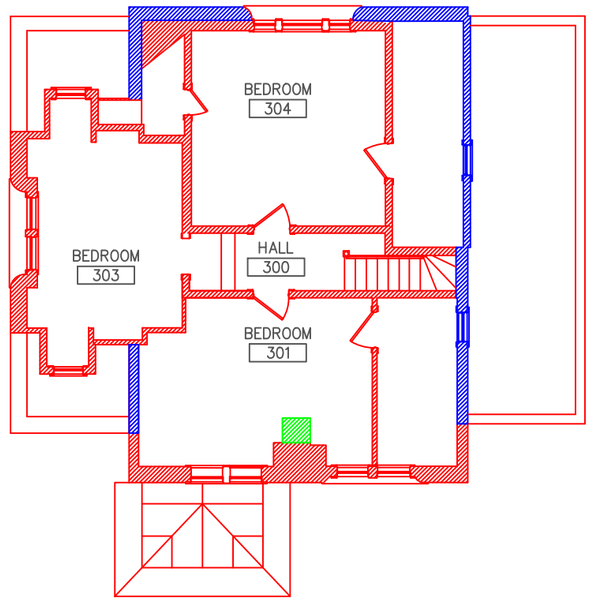
BASEMENT FLOOR



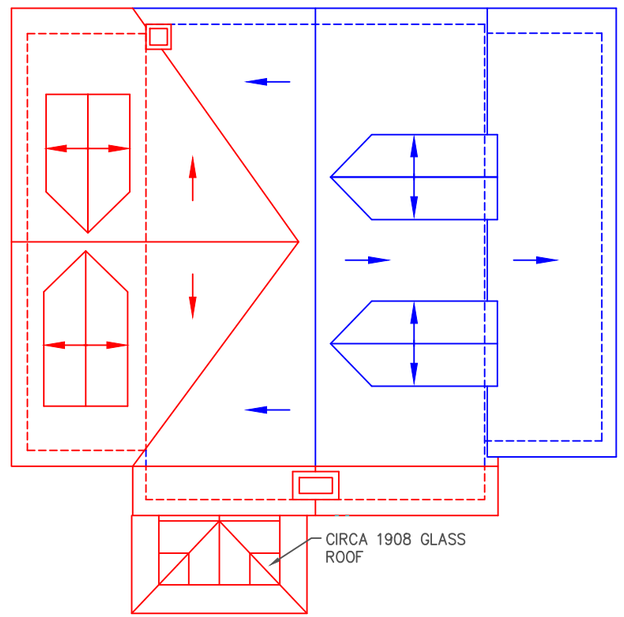
FIRST FLOOR



SECOND FLOOR



THIRD FLOOR



ROOF

EPISODE IA: 1834–1890
BAILLY HOMESTEAD

✳ EPISODE IB: 1897–1918
BAILLY HOMESTEAD

EPISODES II AND III: 1919–2017
BAILLY HOMESTEAD

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- EXISTING
- CONJECTURAL CONSTRUCTION

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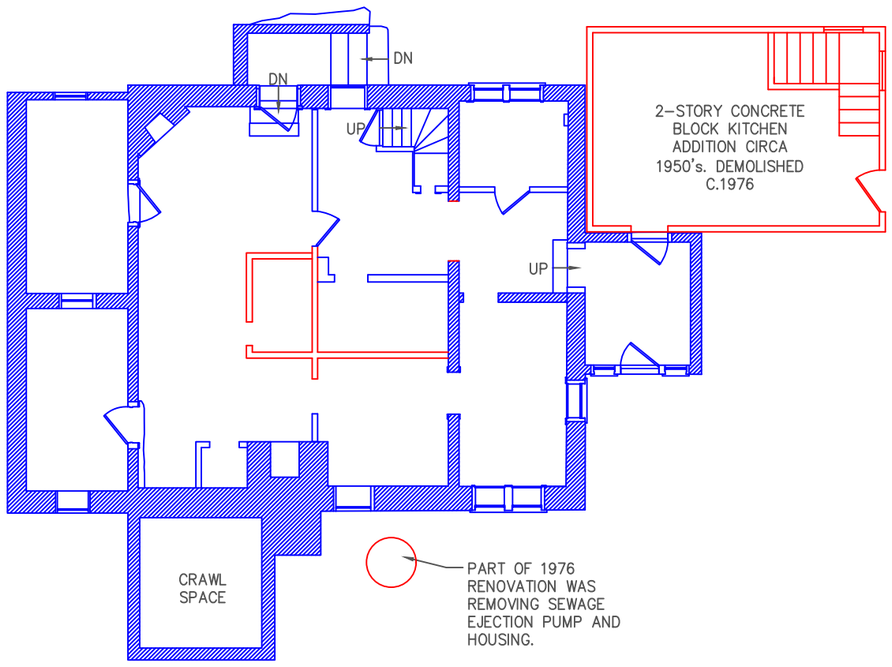
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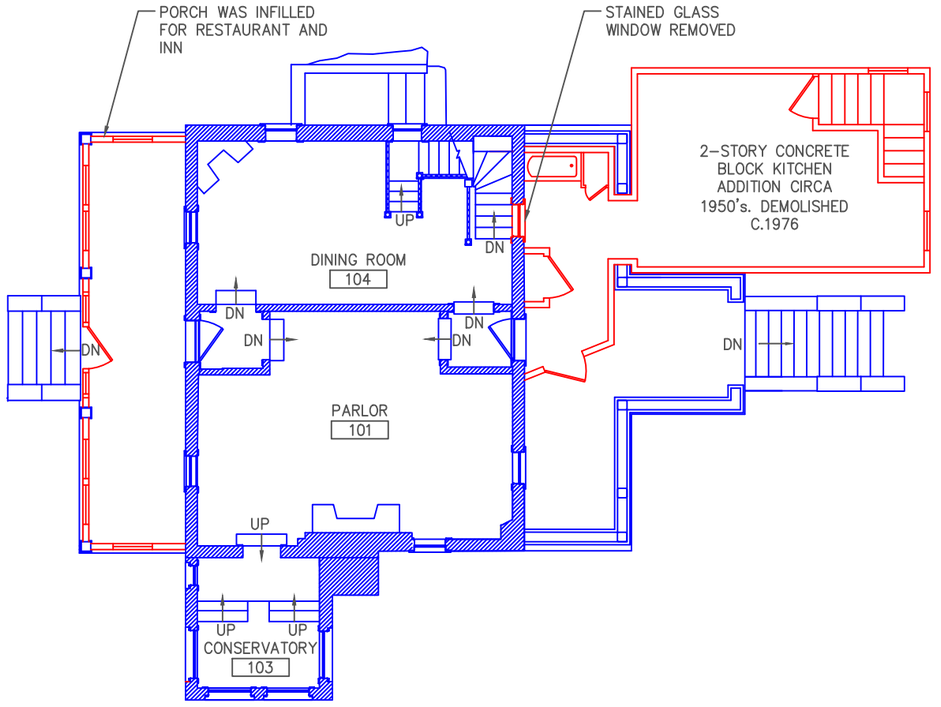
BAILLY HOMESTEAD CHRONOLOGY DRAWINGS

HISTORIC STRUCTURE REPORT & CULTURAL LANDSCAPE REPORT

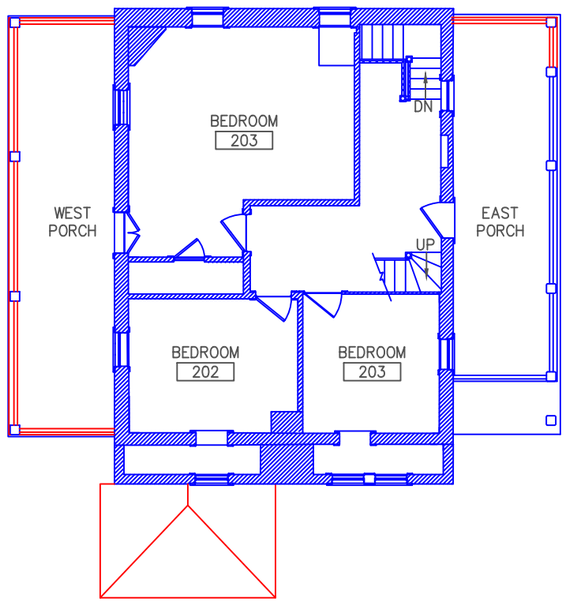
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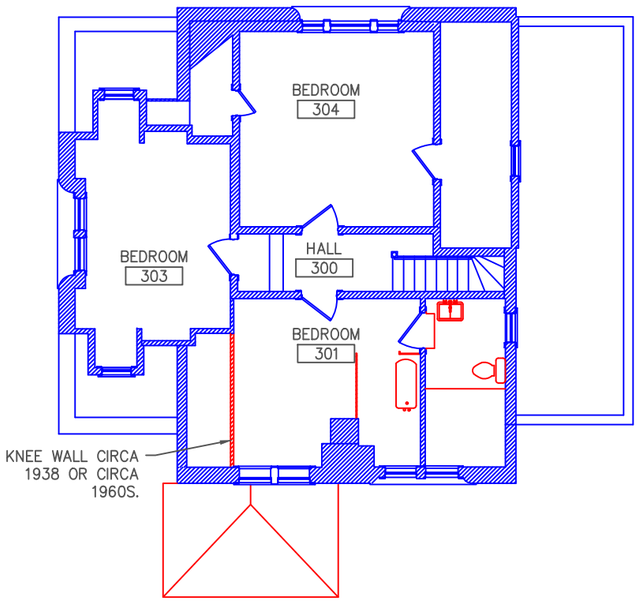
BASEMENT FLOOR



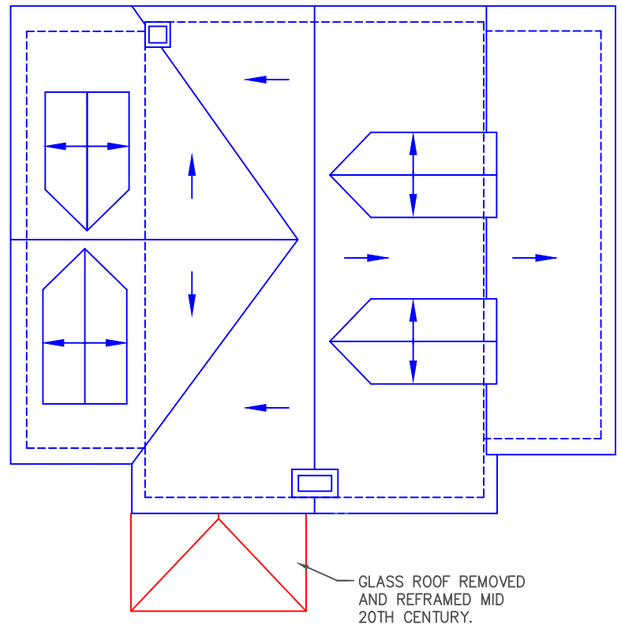
FIRST FLOOR



SECOND FLOOR



THIRD FLOOR



ROOF

EPISODE IA: 1834–1890
BAILLY HOMESTEAD

EPISODE IB: 1897–1918
BAILLY HOMESTEAD

✳ EPISODES II & III:1919–2017
BAILLY HOMESTEAD

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BAILLY HOMESTEAD CHRONOLOGY DRAWINGS

HISTORIC STRUCTURE REPORT & CULTURAL LANDSCAPE REPORT

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Brick House HS-19

The Brick House was constructed ca. 1875 for Rose Bailly. The building was set perpendicular to the Main House and was connected by the first and second floor porches. The first floor was used as a kitchen, while the second floor was used as Rose's studio. The building also had a walk-out basement, with a door on the east side, facing the ravine. The interior layout is not documented.

The house was moved ca. 1904 to its present location, rotated clockwise ninety degrees. Around 1908, the south addition was constructed.



Figure 2.82. Early view, ca. 1890, of the Brick House HS-19 before it was moved. In the background, a glimpse of the two-story log laundry building which was demolished in the 1950s, can also be seen (red arrow). There was a second story breezeway attaching the second story of the brick house to the second story back (east) porch. (Bailly Homestead ca. 1890, Housekeeper Amanda Gustafson, Donated by Leonard Johnson, L-84, H-01-0095)

Photo reverse notation: *The back porch from the north end looking south. The brick building is the kitchen. The porch is used to dry clothes, and as an appendage to the kitchen. You see the little balcony just like the one over the front porch and under it stands Amanda Monarch of all she surveys. That part of the porch outside of the… on the left of the picture has been added since our return from Europe like in the brick house. On each side of the kitchen door are niches for St. Joseph and the B. Virgin. In the gable there is a crucifix. The steps lead down to the pavement in front of the chapel which faces the same way as the kitchen.*



Figure 2.83. Front (west) porch of the Bailly Main House HS-18 before the house was raised and the brick kitchen house was relocated. Through the front door, note the northern-most niche adjacent to the brick kitchen house door. (INDU, H-01-0099, ca. 1890)
Back reads: *Bailly Homestead, from left to right: Rose Bailly Howe, her daughter Frances Howe, her niece Jenny Wicker.*



Figure 2.84. Looking east, the Two-Story Log Laundry House on the left. Brick House HS-19 on the right. Note the Two-Story Log Laundry House is on the left. A well pump may be visible between the two structures. The Brick House shows signs of significant masonry work around the entry door and the windows. A wood bulkhead is in the foreground of the brick house, which provided access to the basement from the exterior after the building was moved to this location. There are also two chimneys present on the roof. (INDU 1919-1934 Photographs and Postcards_SSND, ca. 1919-1934).



Figure 2.85. Brick House Kitchen 100, ca. 1970s. (Image 0060 INDU Museum Collection).



Figure 2.86. Brick House Bedroom 202, ca. 1970s. (Image 0064, INDU Museum Collection).



Figure 2.87. Brick House Living Room 102, ca. 1970s. (Image 0063, INDU Museum Collection).



Figure 2.88. Brick House front porch and hood, 1972, looking north (the CMU kitchen addition to the Main House is in the background). (H-01-0205, INDU, 1972).



Figure 2.89. Brick House, 1972. Note the north chimney is missing, looking south. (photo scans, INDU, 1972)



Figure 2.90. Brick House, 1972. Note the asbestos hexagonal-style shingles, which were red. The chimneys are not missing. The hood and porch railings likely date to between 1919 and 1972, looking east. (INDU, 1972)



Figure 2.91. Brick House, ca. 1975 or later, looking east. (L1^27, INDU).



Figure 2.92. Brick House, ca. 1975 or later, looking east. (L1^32, INDU).



Figure 2.93. Brick House, ca. 1975 or later, looking east. Note that the wood shingle roof is new when this photograph was taken. (L2^30, INDU).



Figure 2.94. Brick House, 1976, looking east. (H-01-0168, INDU Museum Collection.)

Two-Story Log House HS-20

The Two-Story Log House is a small building, constructed by Frances Howe sometime between 1891 and 1904. The purpose she stated, was to serve as a “landscape companion” to the Chapel. This building was constructed from logs of two older buildings, the tool shed (below) and a barn.



Figure 2.95. View of Warehouse/Tool Shed ca. 1890, looking northeast, before its dismantling and reconstruction into the Two-Story Log House HS-20. Note there is a clapboard building north of this structure.

The description by Frances reads: *Old log building renovated on of the old warehouses required for the purpose of the fur trade. Grandfather was an agent for the American fur Company, and had these buildings outside of the dwelling house for purposes of storage. Now this is used by the men to store their tools and repairing material. This is the building of which you have a partial glimpse through trees in the previous photograph, the side walk is the same as that in front of the chapel.*



Figure 2.96. Two-Story Log House in 1916 with a shed addition on the north side. Note the windmill in the foreground. The front door during this period is on the east side of the building, facing the ravine. View looking east. (1916 Hilmer Charleson photo album, INDU 103, photo 211)



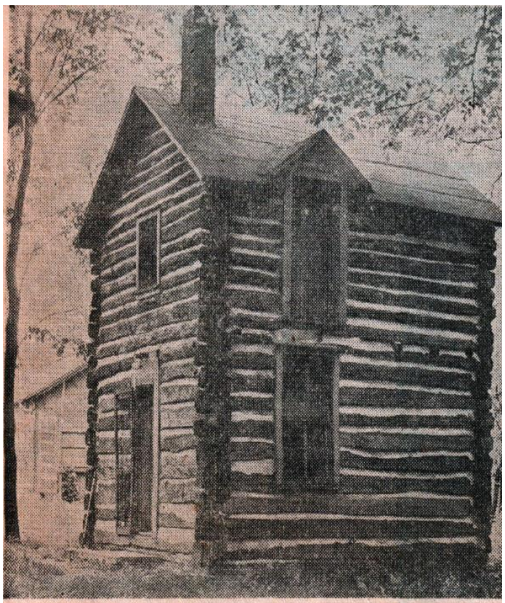
Figure 2.97. Two-Story Log House in 1916 with a balcony to the second floor door that is deteriorated and falling. View looking northeast. (1916 Hilmer Charleson photo album, INDU 103, photo 213)



Figure 2.98. Two-Story Log House in 1916, looking south. The shed addition is attached to the north side of the building. View looking south. (1916 Hilmer Charleson photo album, INDU 103, photo 216)



Figure 2.99. Cropped view of HS-20. The door has shifted to this west side of the building by 1924. The second floor balcony has been removed. There is a light above the entry door. Chinking and daubing are in poor condition. View looking northeast. (1924 photo album, INDU 103)



A STURDY SURVIVOR and one of the few remaining buildings on the homestead site founded by Joseph Bailly is this two-story servants building. It was renovated by Frances Howe.

Figure 2.100. Building located behind (north) of the Two-Story Log House is a garage or barn structure. View looking northeast. (Gary ptrib_Ritter.W, INDU, 1956)



Figure 2.101. South and east walls of the Two-Story Log House 'before restoration.' View looking northwest. (Mosier, Leigh. Unknown Publisher WTHM, INDU, ca. 1966)

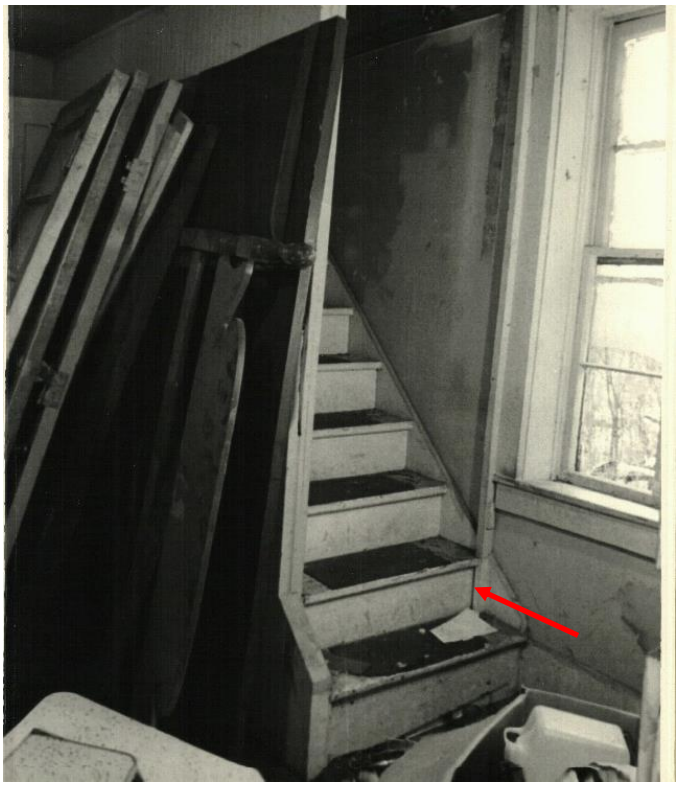


Figure 2.102. Two-Story Log House Stairs, ca. 1970s. the red arrow points to what may be a very narrow door jamb, so that there may have been a door installed near the base of the stairs. Note the interior trim at the window and plaster walls. It is assumed there was a cooking stove on this level, as the flue is visible in the second floor image in Figure 2.103. (Imag0093, INDU).



Figure 2.103. Two-Story Log House Stairs and Second Floor, ca. 1970s, looking southwest. The ceiling appears to be clad in boards. The flue in the center of the room comes from the first floor and exhausts into the bracketed chimney. Walls appear to be lath and plaster. The railing at the stairs features simple profiles. There also appears to be wire molding, similar to what is installed inside the main house (see red arrow). (Imag0094 INDU).



Figure 2.104. Two-Story Log House, ca. 1975 or later, looking northeast. (L1^66, INDU)



Figure 2.105. Two-Story Log House, post reconstruction, ca. 1977 or later, looking northeast. (L2^58, INDU)

Scope of Two-Story Log House 1967-77 Reconstruction[289]:

- Construction of new reinforced concrete masonry unit and brick foundation on concrete footing. Foundation with vents on the north and south sides. Brick from existing building salvaged and used for new foundation and reconstruction of chimney.
- Log replacement. Approximately 80% new logs used.
- Salvaged and reused two rafters and one collar tie.

[289] Restore Exterior Bailly Homestead and Outbuildings, Drawings Produced by the NPS Drawings, Architect, K. Bennett, Drawing No. 626/25,000B, Pkg. No. 204, Sheets 12-13, August 1975.

- New roof 2x4 roof framing.
- New wood ridge board and shingles over asbestos underlayment.
- All new exterior wood trim replacement.
- Chinking and daubing replacement.
- Reproduction board and batten doors (first and second floor), frame, and trim.
- Restored existing window sashes. Lower sash in first floor east Window 100 was reconstructed to match the existing. New glass installed.
- It is also assumed that the existing wood flooring was installed at this time, although it is not documented in the drawings.

Known Storehouse Maintenance since 1977:

- 1998 National Historic Landmarks Section 8 Visit uncovered that the roof was redone incorrectly, and a powder post beetle infestation was active.
- July 2004 – Application of Tim-bor for powder post beetles and wood boring bees (coordinated with sealing logs).[290]
- July 2004 – Installation of Sentricon Termite Colony Elimination System.[291]
- August 2004 – Sealing Logs with Total Wood Protectant TWP 200 Series.[292]

[290] Requisition Form, DOI, INUD Maintenance Files, Signed July 6, 2004.
[291] Requisition Form, DOI, INUD Maintenance Files, Signed July 6, 2004.
[292] Requisition Form, DOI, INUD Maintenance Files, Signed August 23, 2004.

Storehouse HS-21

The original building in the general location of the existing Storehouse pre-dated 1835 and was later used as a chicken house with a shed roof addition on the south side, per Frances Howe (Figure 2.106).[293] That original storehouse was reconstructed to its current form by family members between 1890-1907. It was completely dismantled and reconstructed by the National Park Service in 1976-77, replacing deteriorated logs and the majority of the roof structure. The building today contains only a few logs and one interior collar tie that date to either the ca. 1890s or earlier pre-1835 structure. Many of the replacement logs appear to be repurposed telephone poles.



Figure 2.106. View of HS-21 Storehouse ca. 1890 before its reconstruction, looking west. The description by Frances reads: *Another old warehouse which we now use as a chicken house there is a hen standing in the doorway. This building is at a little distance from the house west of the front porch. Separated from the rest of the immediate premises by a grass plot several yards wide. Behind this house there is a well wooded ravine.*

Note, the side walls are much taller than the existing structure, at thirteen logs high, while the existing building is only ten logs high. The roof was constructed with log purlins, which exposed the ends of the log roof structure. There was a dovecote in the gable, near the ridge. There are two doors installed in the front door opening – a board and batten door and an interior screened door (both swing out). A large vertical board shed addition was located on the south side, with a man door with strap hinges. (1890 ca. numbered set, INDU, 16)

[293] Howe, Frances, 164.



Figure 2.107. View of HS-21 Storehouse in 1924, looking northwest. The foundation material is difficult to discern in this photograph. This is the earliest known photograph of the reconstructed building. This likely had an earthen floor, as noted in the 1975 NPS documentation drawings. (1924 photo album, INDU 103)

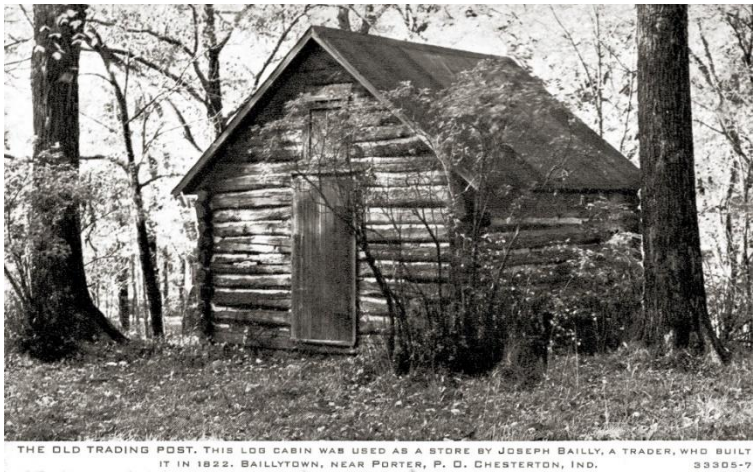


Figure 2.108. View of HS-21 Storehouse in the 1950s, looking southwest. (C.R. Childs Postcard, ca. 1950)



Figure 2.109. View of HS-21 Storehouse in 1966, looking southwest. (Slide INDU 2826-2843, 1966)



Figure 2.110. View of HS-21 Storehouse in 1972, looking west. (H-01-0124 (Store Hse) INDU, 1972)



Figure 2.111. View of HS-21 Storehouse deteriorated condition with earthen floor, looking west towards back wall. The interior walls are clad with wood boards. Note the vents in the brick foundation walls, which were replicated as part of the reconstruction. (IMAGG0053, Russell Jones, Book 4, INDU, 1972)



Figure 2.112. View of HS-21 Storehouse new foundation in 1976, looking southwest. (H-01—233, INDU, 1976)



Figure 2.113. View of HS-21 Storehouse in 1977, during reconstruction, looking west. (L2 27, 1977)



Figure 2.114. View of HS-21 Storehouse in 1977, during reconstruction, looking southwest. (INDU photo scans b, 1977)



Figure 2.115. View of HS-21 Storehouse during 1977 reconstruction. Note the use of the wood trunnels between log joists to help stabilize and support reconstructed log walls, looking west. (L2 26, INDU, 1984)



Figure 2.116. View of HS-21 Storehouse post reconstruction, ca. 1977 or later, looking west. (L1^04, INDU)



Figure 2.117. View of HS-21 Storehouse in 1984 after logs have weathered, looking west. (Maintenance dept scans, INDU, 1984)

Scope of Storehouse 1967-77 Reconstruction[294]:

- Construction of new reinforced concrete masonry unit and brick foundation on 8”x18” reinforced concrete footing. Foundation with vents on the east and south sides.
- Log replacement. Logs that were only partially decayed were salvaged and decayed wood removed and installed on the east elevation.
- Salvaged center collar tie to remain; the other two collar ties are reproduction.
- New roof 2x6 roof framing. New wood ridge board and shingles over asbestos underlayment.
- Deteriorated exterior wood trim replacement.
- Chinking and daubing replacement.

[294] Restore Exterior Bailly Homestead and Outbuildings, Drawings Produced by the NPS Drawings, Architect, K. Bennett, Drawing No. 626/25,000B, Pkg. No. 204, Sheets 12-13, August 1975.

- Reproduction board and batten door, frame, and trim.
- Reproduction board and batten shutter at existing rear window jamb.
- Removed window sash and treated with Penta (short for Pentachlorophenol – a wood preservative used in utility poles). Window sash re-puttied and reinstalled with new glass lites. Window sash painted 7.5R – 3/6.

Known Storehouse Maintenance since 1977:

- 1998 National Historic Landmarks Section 8 Visit uncovered that the roof was redone incorrectly, and a powder post beetle infestation was active.
- July 2004 – Application of Tim-bor for powder post beetles and wood boring bees (coordinated with sealing logs).[295]
- July 2004 – Installation of Sentricon Termite Colony Elimination System.[296]
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Chapel HS-22 Building Chronology

The chapel building is at least the third generation of structure on or near this location.

Episode I: Bailly Family Ownership 1822 - 1918

One of the first known structures built on the homestead was a two-story log kitchen building, believed to have been constructed in the 1820s or 1830s (Figure 2.118). Frances described it in 1907:

> *The kitchen was a story-and-a-half or two-story structure, its upper story having been used for storage and reached by an outside stair. Its first floor had a single room, spacious, well lighted and dominated from one end by a large fireplace. In later years, perhaps because it needed repair, its large fireplace was replaced by a large wood-burning stove, and the fireplace crumbled away. The hole it occupied was then covered by board siding.*[298]

This is said to be the building where Joseph Bailly, Marie Bailly, and Marie's oldest daughter Therese died. Joseph died in 1835 and Therese died ca. 1843. Marie moved away for a time after their deaths, and when she returned, she chose to live in the kitchen house instead of the main house, at least in part because of its association with Joseph and Therese. Marie died in the kitchen house in 1866, and in 1869, the property was inherited by her oldest daughter Rose Victoire Howe.

Shortly after she inherited the property, Rose Howe had the old kitchen reconstructed to create a single-story log chapel to honor her parents and sister (Figure 2.119). The work was done while Rose and her daughters were on a five-year tour of Catholic shrines in Europe. Much of the original building had to be taken apart for that project, but portions of the front wall were retained, including the former second story doorway, which was covered with planks. A crucifix was installed on those planks in the upper front gable end. The reconstruction project, which was done by a Swedish carpenter named Johnson who had worked on the main house a few years earlier, included adding a brick foundation and plastering the interior.[299] A bell from St. Mary's Academy in Terre Haute was also installed. The flooring was from the second floor of the old kitchen house. A belfry and apse were added later.[300]

Around 1900, the building was moved twenty-five feet north of the original kitchen house by Frances and the apse was constructed where the old fireplace had been, taking its current form (Figure 2.123). Stained glass windows were added.[301] According to Frances, this work was accomplished while she and Emma were in Europe, and that some of the materials used for the

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[298] Howe, *The Story of a French Homestead,* 136, 146, 158.
[299] Howe, *The Story of a French Homestead,* 159-164.
[300] Walter, *Historic Structures Preservation Guide Bailly Homestead,* 6.2. Sullivan, "Historic Site Survey, The Bailly Homestead, Porter County, Indiana," 1958, I.1.
[301] Howe, *The Story of a French Homestead,* 164*;* Walter, *Historic Structures Preservation Guide Bailly Homestead,* Sec. 6, 2. Walter dated this change ca. 1891, but Howe wrote that it was done after she inherited the property in 1891. Bailly Family and Homestead Exhibit, research notes Bailly file WTHM.

Chapel work, including the floor joists, were salvaged from the Main House, including the floor joists. She explained that she reused the older parts

> *…because of the reverence I felt for the material for it came from the rooms which had been used for Divine Service. The log rafters upon which the floors of this room rested, the heavy deal flooring carefully made over, the whitewood ceiling of the room in which Mass used to be celebrates; all found their places in the chapel.*[302]

Episode 2: Private Ownership 1919 - 1971

Between 1919 and 1932, the Craftsman-style front door was installed. The homestead was leased to private parties by the School Sisters of Notre Dame, and the use of the Chapel was not included as part of the property. All that was stored in the building was to remain and nothing was to be removed. [303]

La Roche had reportedly "torn out the altar and the pews from the little chapel." [304] In 1957, the Chapel and the Coachman's House (Two-Story Log House HS-20) underwent major repairs.[305]

Episode 3: Indiana Dunes National Lakeshore, 1971-2017

The Chapel, as witnessed today, contains only a few early logs, as the structure was completely dismantled in 1976-77 and rebuilt, replacing deteriorated logs and the majority of the roof structure. Repurposed and creosoted telephone poles were installed during this reconstruction. The interior finish materials were removed during this work.

In 1998, the National Historic Landmarks Section 8 Visit uncovered that building was filthy and was used for flammable storage. There was an active powder post beetle infestation and evidence of rodents living in the building, which had resulted in damaged to the logs and studs and siding. The building was suffering from severe dry rot. There was screening installed to patch holes and galvanized steel straps were visible. The Gothic arch was pulling away and electrical conduit was hanging lose.

The List of Classified Structures states that the building was in poor condition in 2003.

Another renovation in the 2010 included installation of a replica decorative rusticated concrete block and concrete foundation and select log replacement. Replacement logs during this work were hewn from untreated timber obtained from northern Michigan.

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[302] Howe, 164.
[303] Contract 4 June, 1932, School Sisters of Notre Dame, Papers and Photographs regarding Bailly Homestead, ca. 1919 to ca. 1946; Clemensen, *Bailly Homestead Unit, Determination of Structures Composing the Bailly Homestead,* 1975, 7.
[304] Letters dated Nov. 26, 1940, Dec. 1, 1940, Dec. 17, 1940, SSND, Bailly Homestead papers.
[305] Sullivan, "Historic Site Survey, The Bailly Homestead, Porter County, Indiana," 1958, V.5.

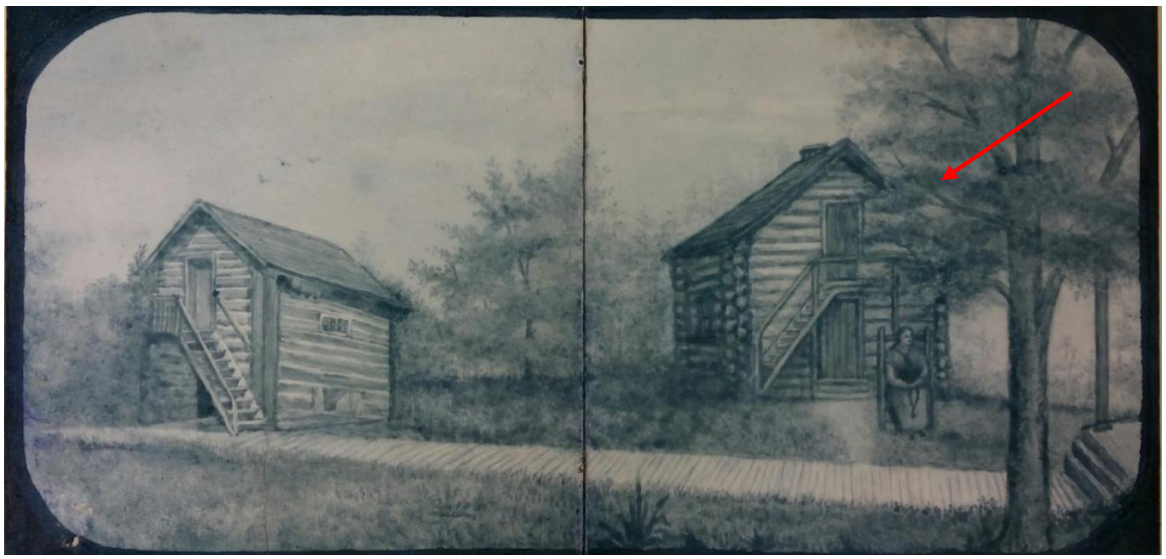


Figure 2.118. View of original fur trading office (left) and two-story kitchen house (right). Note the steps on the right side are the wood steps to the back (east) porch. This building was later dismantled to construct the Chapel. The cooking fireplace chimney is seen on the back side of the building.



Figure 2.119. View of HS-22 Chapel ca. 1890 after its construction from the logs from the two-story kitchen house. The description by Frances reads: *Front view of the chapel in which the belfry does not appear. A side walk is in the foreground. Virginia looks almost devout, but in spite of her serious expression, she is responsible for my amusement, as she uttered a most absurd remark just under her breath and in a way to avoid a mark of breach of silence. The boxes and sticks are for morning glories and the vine in the gable is a Virginia Creeper. The steps lead up to the back porch.*
Note, the second floor door remains. The crowns of the exposed corner logs were covered with vertical boards for protection. The wood back porch steps from the Main House are on the right. There is a board walkway running in front of the Chapel (Howe, *The Story of a French Homestead,* 164*;* Historic photo set, #9; Appendix B.)



Figure 2.120. View of HS-22 Chapel interior ca. 1890 after its construction from the logs from the two-story kitchen house. Note that this is before the apse was constructed. The description by Frances reads: *Chapel interior, taken from outdoor. The lamp hanging from the ceiling hides the altar piece*…(1890 Historic Numbered Photo Set, INDU Museum Collection; Appendix B)



Figure 2.121. View of HS-22 Chapel ca. 1890 showing the belfry on top, looking east. (1890 Historic Numbered Photo Set, INDU Museum Collection; Appendix B)



Figure 2.122. View of HS-22 Chapel belfry ca. 1890, looking northeast.
The description by Frances reads: *Chapel belfry taken from a dormer window on the east side of the house. You see the chapel roof, also the roof of this house as part of a foreground. You will see pieces of [?] on our roof, left by carpenters and painters, having been used as a sort of scaffolding. To the left through trees a glimpse of another log building. (*1890 Historic Numbered Photo Set, INDU Museum Collection; Appendix B)



Figure 2.123. View of HS-22, looking northeast. (1916 Hilmer Charleson photo album, INDU 103, photo 210)



Figure 2.124. Cropped view of HS-22, looking north. (1924 photo album, INDU 103)

Note the crowns of the southeast corner logs were covered with vertical boards.



Figure 2.125. Cropped view of HS-22, looking east. Note that this photograph is showing work in progress with the re-chinking and daubing of the building. (1924 Album, INDU Museum Collection)

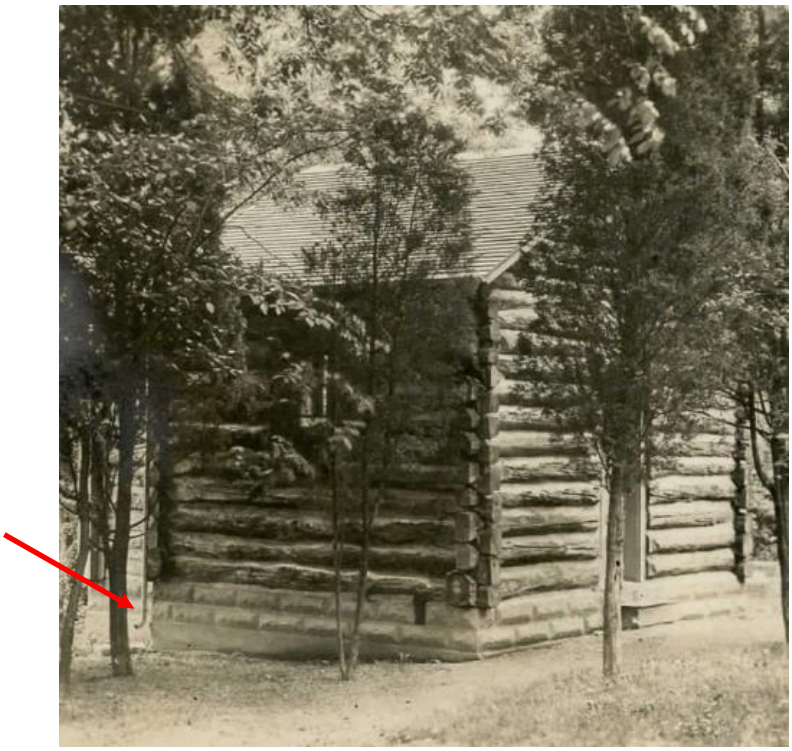


Figure 2.126. Chapel, looking southeast. (INDU 1919-1934 Photographs and Postcards_SSND)

Note there is a downspout in the northeast corner of the nave. The stoop to the front door is wood.



Figure 2.127. Chapel with what appears to be a concrete walkway and wood stoop, looking northeast. (Bowers f., INDU, ca. 1926)



Figure 2.128. Chapel altar, ca. 1930. (Bailly Homestead Postcard Collection, WTHM)

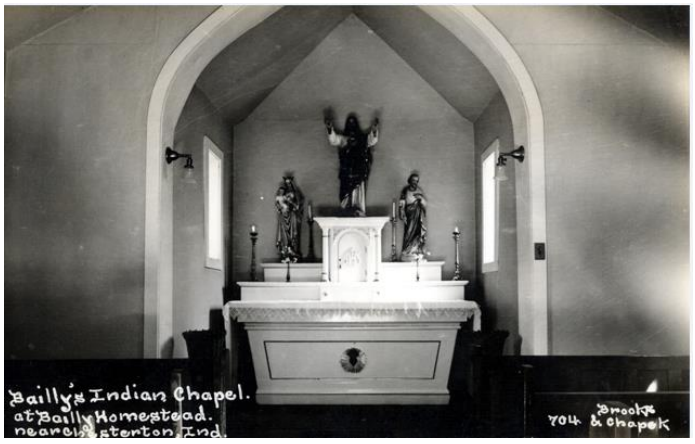


Figure 2.129. Bailly's Indian Chapel, ca. 1930. (Brooks and Chapek, INDU collection)



Figure 2.130. Cropped view of HS-22 Craftsman-style entry door with Main House front porch in foreground, looking east. (INDU H-01-176, 1947 or before)

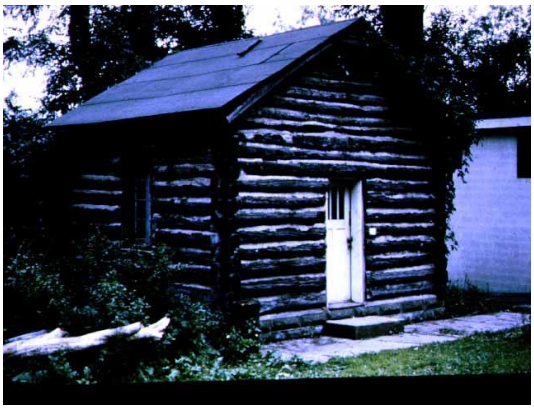


Figure 2.131. View of Chapel with rolled roofing and Craftsman door, ca. 1975 or later, looking southeast. Note the kitchen addition to the Main House is visible in the background. (L1^101, INDU)

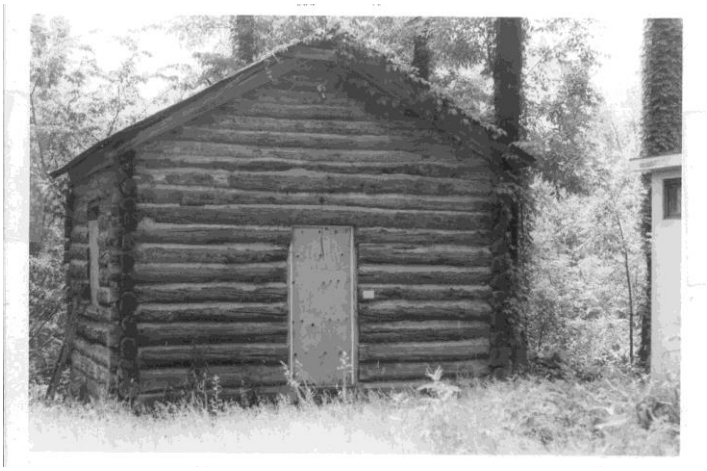


Figure 2.132. View of Chapel prior to reconstruction, ca. 1970s, looking east. Note there is a horizontal board at the gable that may have originally supported the cross. There is also a light mounted on the exterior wall under the horizontal board. (H-01-0134, JC Photo Archive, INDU, ca. 1970s)

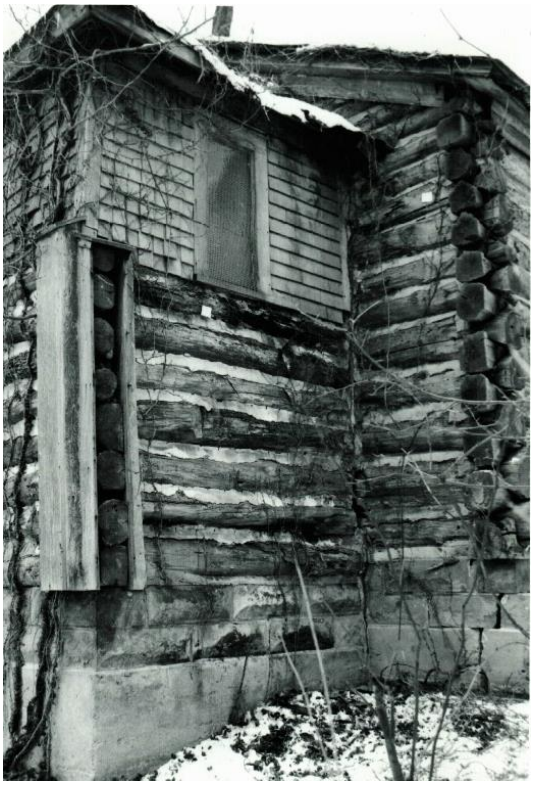


Figure 2.133. View of Chapel severe deterioration at the north walls, ca. 1970s, looking southwest. The foundation appears to be rusticated concrete block over concrete. The rusticated concrete block and top of concrete foundation wall do not align at the apse/nave connection. The concrete foundation is cracked under the northeast corner of the nave. The logs are marked with white squares, likely ahead of the reconstruction. (INDU)

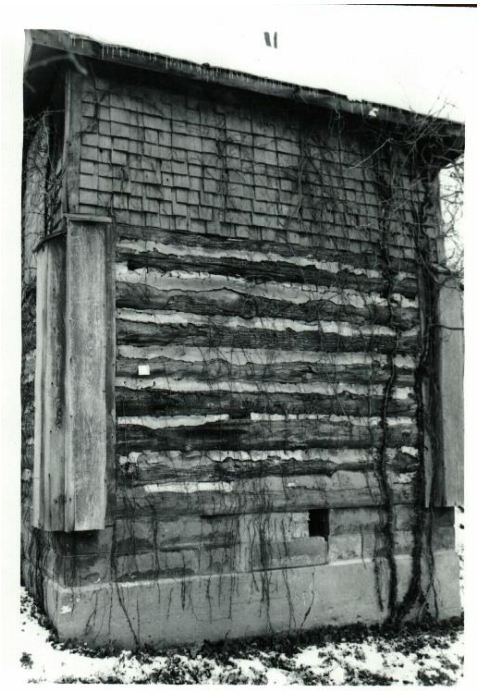


Figure 2.134. View of Chapel severe deterioration at the east apse wall, ca. 1970s, looking west. There is a hole in the foundation. The logs are marked with white squares, likely ahead of the reconstruction. (INDU)



Figure 2.135. View of Chapel severe deterioration at the log wall juncture, ca. 1975 or later, but prior to reconstruction in 1976. (L1^18, INDU)



Figure 2.136. View of Chapel south wall. This is one of the few photographs that show the crown glass in the apse windows. (Bailly Homestead National Historic Landmark Form, May 31, 1977)

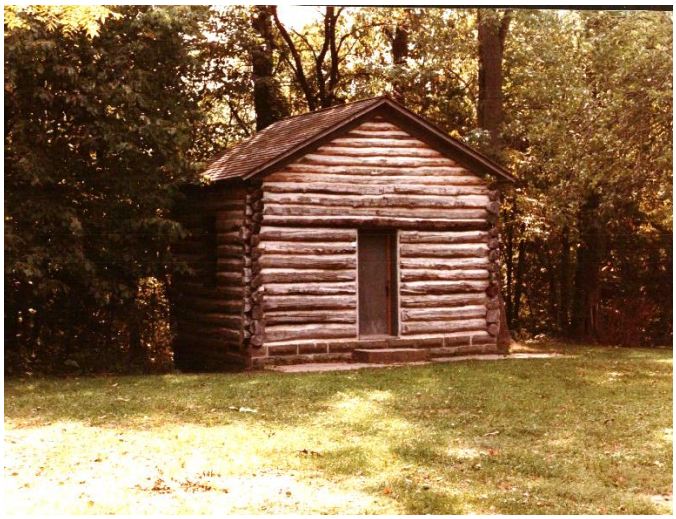


Figure 2.137. View of Chapel, ca. 1984, looking east. (Maint dept scans, IMAG0006, INDU)



Figure 2.138. View of Chapel, October 2010, looking north. (INDU LCS, 2011)



Figure 2.139. View of Chapel, November 10, 2010, looking east. New footings poured. The Chapel building was moved south of its location and placed on a log cribwork while the foundations were construction. Once complete, the Chapel was slid back and lowered onto the new foundation. (INDU LCS, 2011)

Scope of 1967-77 Reconstruction[306]:

- Foundation repaired and broken rusticated concrete foundation blocks replaced. The drawings also indicate that it was painted and that new vents were installed.
- Log structure completely dismantled for log replacement. Logs that were only partially decayed were salvaged and reinstalled. Drawings state that 60% were new or historic but off-site logs. Some logs were replaced with old creosote-treated power poles.
- Three original log rafters (purlins) were salvaged. All other wood framing is new, including the 7-inch diameter log purlins and 2x4s. New wood ridge board and shingles over asbestos underlayment installed.
- All roof and door trim, as well as the door itself, were new construction.
- Log crown covers at apse were replaced to match the existing.
- Wood wall shingle siding was new.
- Historic window sashes repaired with new glazing and putty.
- Per the drawings, the interior finishes were to be retained and protected, except for the apse ceiling, which required re-framing. However, it appears that almost all of the interior finishes were indeed removed during this work.

Known Maintenance since 1977:

- July 2004 – Application of Tim-bor for powder post beetles and wood boring bees (coordinated with sealing logs).[307]
- July 2004 – Installation of Sentricon Termite Colony Elimination System.[308]
- August 2004 – Sealing Logs with Total Wood Protectant TWP 200 Series.[309]
- 2010 - Log structure supported and moved off foundation. New concrete footings and replica rusticated concrete block foundation installed.
- 2010 - New logs installed in walls. Old power poles which were installed as log replacements in the 1960s were stable and determined to remain. Additional roof framing work may have been done but is unknown. Work done by Historic Preservation Training Center.

[306] Restore Exterior Bailly Homestead and Outbuildings, Drawings Produced by the NPS Drawings, Architect, K. Bennett, Drawing No. 626/25,000B, Pkg. No. 204, Sheets 16-17, August 1975.
[307] Requisition Form, DOI, INDU Maintenance Files, Signed July 6, 2004.
[308] Requisition Form, DOI, INDU Maintenance Files, Signed July 6, 2004.
[309] Requisition Form, DOI, INDU Maintenance Files, Signed August 23, 2004.

Missing or Unknown Buildings and Structures

The Bailly Homestead has had an ever-changing landscape and buildings since it was settled in 1822. The log structures have moved around, new structures have been built, and other demolished in the last one hundred and ninety-five years. Some of these buildings have been documented orally, through drawings (historic tiles), or through photographs. If found in the files during research for this report, these photographs have been collected to present in this section. In addition, Frances Howe discussing the north farmhouse, which is believed to have been the other homestead shown in the tiles. There were many buildings scattered throughout the Bailly family holdings that are not included within this study area.

In 1958, the National Park Service sent a representative to the Bailly Homestead to meet with the La Roche family. At that time, there were 14 structures on the 43 acres:

- Main House
- Two-Story Log Building
- Chapel
- Brick House
- Laundry House (north of the Brick House)
- Two small buildings that resemble tool sheds
- Two-car garage with lean-to shed attached
- Three small, frame, one-story houses
- Two small farm structures
- Barn destroyed in 1957

A letter sent to INDU by Marjorie Lee in 1992, states that she had fond memories of the spring house.[310] The location for this building is unknown. A photograph of this may exist, as seen below in Figure 2.256.



Figure 2.140. Aerial view to the south of the homestead, 1958. (National Park Service, Denver Service Center, Technical Information Center, Photo Collection, Bailly Homestead, 1958.)

[310] Lee, Marjorie. Letter to Bailly Homestead Historian, INDU Museum Collection, April 1992.



Figure 2.141. Aerial view to the southwest of the homestead, 1960s. (INDU Museum Collection.)



Figure 2.142. Cropped view of the Two-Story Log Laundry House on the left. View looking southwest. This building was clad with weatherboard. (Main House on the right). Note the house was clad in wood siding, but the vertical large corner boards remain. There was a front porch enclosed by lattice at this time. It was later enclosed. (1924 photo album, INDU 103).

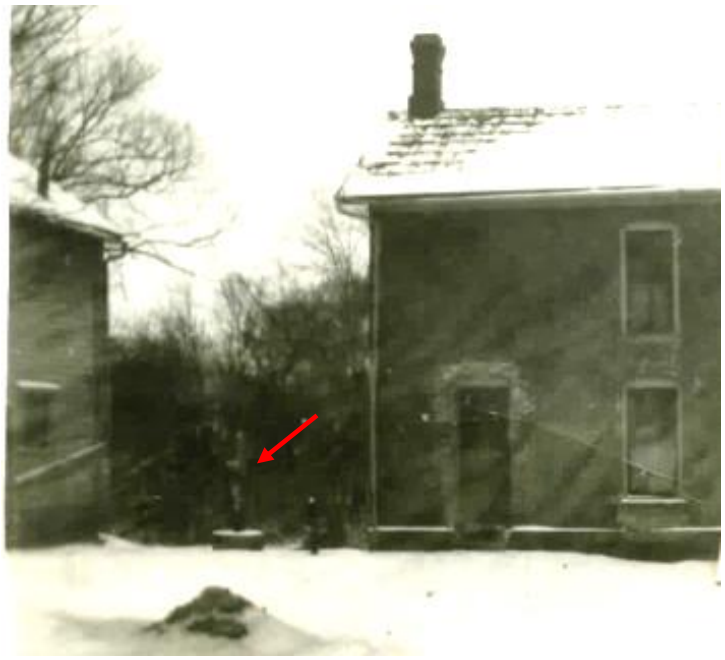


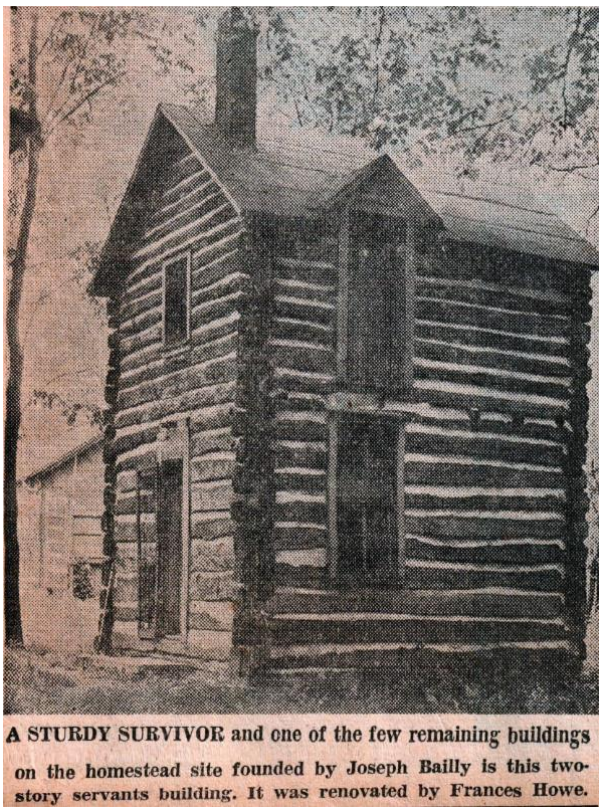
Figure 2.143. Two-Story Log Laundry House on the left. Brick House HS-19 on the right. View looking east. (INDU 1919-1934 Photographs and Postcards_SSND, ca. 1919-1934).
Note the downspout on the Laundry House likely leads to one of the known cisterns in the area. The red arrow points to a potential well pump.



Figure 2.144. Two-Story Log Laundry House on the right. Main House HS-18 on the left. View looking northeast. (INDU 1919-1934 Photographs and Postcards_SSND, ca. 1919-1934). The second story door is still visible. The front porch has been enclosed.



Figure 2.145. Glimpse of the northwest corner of the Two-Story Log Laundry House on the right. Main House HS-18 on the left. View looking east. (INDU H-01-176, 1947 or before)



A STURDY SURVIVOR and one of the few remaining buildings on the homestead site founded by Joseph Bailly is this two-story servants building. It was renovated by Frances Howe.

Figure 2.146. Building located behind (north) of the Two-Story Log House is some type of garage building. View looking north. (Gary ptrib_Ritter.W, INDU, 1956)



Figure 2.147 Red arrows point to structures that have been demolished. View looking northwest. (Sullivan, INDU 103, ca. 1958)



Figure 2.148. Main House, Laundry House, and Brick House, 1958, looking south. (National Park Service, Denver Service Center, Technical Information Center, Photo Collection, Bailly Homestead, 1958.)



Figure 2.149. Main House, Laundry House, and Brick House, looking northeast. (National Park Service, Denver Service Center, Technical Information Center, Photo Collection, Bailly Homestead, 1958.)



Figure 2.150. Laundry House with front porch gone and roof deteriorated, looking northeast. There is a dog looking into the camera between the trees, 1958. (National Park Service, Denver Service Center, Technical Information Center, Photo Collection, Bailly Homestead, 1958.)



Figure 2.151. There are at least two structures (one is a small house) and then the back of the Storehouse HS-20, 1958, looking northeast. (National Park Service, Denver Service Center, Technical Information Center, Photo Collection, Bailly Homestead, 1958.)



Figure 2.152. Photograph from the back field of the barn/garage, Two-Story Log House, small outbuildings (well house) and the Main House in the center background, looking south. (National Park Service, Denver Service Center, Technical Information Center, Photo Collection, Bailly Homestead, 1958.)



Figure 2.153. Red arrows point to three structures that have been demolished, looking northeast. (H-01-0222, INDU, ca. 1960s)



Figure 2.154. La Roche ranch house, since demolished. (H-01-0155, INDU, 1972)



Figure 2.155. View of the homestead looking south, 1958. (National Park Service, Denver Service Center, Technical Information Center, Photo Collection, Bailly Homestead, 1958.)



Figure 2.156. This may be the spring house that was discussed in previous oral history. It appears to be located northeast of the Main House and Brick House. Refer to the 1918 Historic Period Plan for potential general location. (SSND, Bailly Homestead papers, nd.)



Figure 2.157. Photographs of various outbuildings with unknown locations on the Bailly property. (SSND, Bailly Homestead papers, nd.)



Figure 2.158. View of homestead, looking south. Red arrows point to demolished structures. (maybe 1972 HSR, INDU, 1972)



Figure 2.159. Well building and kitchen addition to Main House in background. Note the large tree that was removed, ca. 1975 or later. View looking south. (L1^42, INDU)



Figure 2.160. Outbuilding, also seen in Figure 2.157. (INDU Powerpoint Presentation)



Figure 2.161. Garage structure and outbuilding, looking east. (INDU Powerpoint Presentation)



Figure 2.162. La Roche north house, view to the north. (INDU Powerpoint Presentation)

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Homestead Lane ca. 1890 looking north with the Main House along the right side of image.
(INDU Museum Collection)

3 CULTURAL LANDSCAPE CONDITION AND ANALYSIS

Chapter 3 | Cultural Landscape Existing Condition and Analysis

Introduction

This chapter describes the existing condition and provides an analysis of integrity of the cultural landscape at the Bailly Homestead.

It begins with an assessment of landscape integrity and a list of features that contribute to historical significance. This is followed by descriptions of existing condition and analysis associated with the following landscape characteristics.[311]

> *Natural Systems and Features* are environmental aspects of a place that have influenced the development and form of the landscape including natural water bodies and soils.
>
> *Topography* is the three-dimensional configuration of the landscape surface, characterized by slope and orientation.
>
> *Spatial Organization and Land Use* is the arrangement of elements that define and create space through the ground, vertical, and overhead planes, including topography, vegetation, natural systems, and buildings and structures. Land use is tied to the ways that people have used the landscape and often relates to patterns of spatial organization.
>
> *Views and Vistas* are groupings of features that create or allow a range of vision which can be natural, or designed and controlled.
>
> *Vegetation* is indigenous or introduced trees, shrubs, vines, ground covers, herbaceous plants, and lawn.
>
> *Circulation* consists of the features and materials that constitute systems of movement including vehicular routes such as roads and parking areas and pedestrian routes such as walks and trails.
>
> *Buildings and Structures* are three-dimensional built features such as houses, log buildings, and retaining walls. In the landscape, these features create mass, scale, and contribute to character by their style and appearance. The five buildings of the Bailly Homestead are addressed in detail in Chapter 4.

[311] Robert R. Page Cathy A Gilbert, and Susan A. Dolan, *A Guide to Cultural Landscape Reports: Contents, Process, and Techniques* (Washington, DC: United States Department of the Interior, National Park Service, Cultural Resource Stewardship and Partnerships, Park Historic Structures and Cultural Landscapes Program, 1998), 53.

Small-scale features are landscape elements that provide specific functions at the site. These include historic fences and concrete caps associated with underground features, and well as contemporary features such as utility poles, waysides, tables, benches, trash receptacles, and a commemorative stone with plaque.

Archeological sites are surface and subsurface cultural materials related to past occupation and use of the site.

Narrative text, diagrams, and photographs describe the existing condition of the landscape. The condition assessment identifies and documents all features present including those whose qualities and features retain integrity and contribute to the significance of the landscape. Field reconnaissance, undertaken in June 2017, assisted in documenting landscape condition.

The existing condition of the landscape is evaluated using the following criteria.

Good - There are no major problems and the features do not require intervention. Only minor or routine maintenance is needed.

Fair – Some deterioration, decline, or damage is noticeable; the feature may require immediate intervention. If intervention is deferred, the feature will require extensive attention in a few years.

Poor – Deterioration, decline, or damage is serious; the feature is seriously deteriorated or damaged, or presents a hazardous condition. The feature requires extensive and immediate attention.

Assessment of Landscape Integrity

Integrity is the ability of a property to convey its historical significance. To have integrity, the landscape must retain the tangible and intangible aspects that make up the identity for which it is significant. For the Bailly Homestead, this identity is associated with the end of the period of significance, 1918. Integrity is defined by seven aspects or qualities: location, design, setting, materials, workmanship, feeling and association.[312] An assessment of integrity for buildings is provided in Chapter 4.

The Bailly Homestead in Porter County, Indiana, retains limited aspects of its historic fabric and character providing a sense of connection to one of the region's prominent pioneering families. Contributing features of the historic landscape are those associated with the Bailly family during the period beginning ca. 1822 and ending in 1918. Since that time, numerous changes have resulted in the removal of landscape features. Despite the small number of remaining landscape features, the relatively low impact of new, non-historic features offers a simplified manifestation of the historic landscape that can be interpreted. The landscape of the Bailly Homestead retains integrity of location, design, setting, and association.

Location

Location is the place where the landscape was constructed or where an historic event occurred. Some landscape features were built or moved into their current locations by the Bailly family during the period of significance. While the core was established by Joseph Bailly beginning in 1822, his family rebuilt and moved buildings and other features through 1918. Landscape features continued to change through various private owners in the following decades. After possession by the NPS in 1971, non-contributing features were removed and log buildings were rebuilt near their footprints dating to 1918. High profile features such as the Entry Drive and allée, the Main House, and topography of the plateau persist and exhibit integrity of location.

Design

Design is the combination of elements that create the form, plan, space, structure and style of the landscape. The Bailly Homestead is an example of a vernacular landscape, evolving over the course of time without a formal plan. It includes unique and more common examples of rural vernacular architecture present in the southwestern Great Lakes region. The Main House has been modified since the 1970s to more closely reflect the character and formality of the early twentieth century. Other site structures are utilitarian and their form and name reflects their intended purpose, for example as a chapel or storehouse. The intentional arrangement of buildings in a linear alignment is apparent. The loss of most small-scale features such as fences and plant beds diminishes the overall design in terms of integrity; however, the framework of the historic layout remains.

Setting

Setting is the physical environment of the landscape. The Bailly Homestead is located at the southwestern Great Lakes region on the upper banks of the Little Calumet River. While the Bailly story relates to the urban and industrial development along the south shore of Lake

[312] National Register of Historic Places, National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation (Washington, DC: Department of the Interior, 1990 (1997 ed.)), 44-45.

Michigan, the rural and wooded setting immediately surrounding the site has integrity for setting. While the setting of the homestead has been influenced by impacts such as loss of active farming, expansion of forest cover, changes in the alignment of the Calumet River and Howe Road, the setting has remained largely intact through incorporation into the Indiana Dunes National Lakeshore. The lack of modern intrusions and surrounding forest conveys a sense of the historic setting.

Materials

Materials are the physical elements that were combined or deposited during the particular period of time and in a particular pattern or configuration to form the landscape. The historic and contemporary vegetative composition of the landscape consists of a variably open ground plane under dispersed canopy tree cover surrounded by a forest matrix. Within this general structure, the pervasive loss of understory planting beds, shrubs, and trees has altered historic integrity of the site in terms of materials. Some concrete and brick walks remain although other historic gravel and brick paths are no longer present in the landscape. The Bailly Homestead does not retain integrity of materials.

Workmanship

Workmanship includes the physical evidence of the crafts of a particular culture or people during any given period. The extant Main House and its reconstructed patio provide a sense of integrity of workmanship; however, the extensive loss of ornamental vegetation and other small scale features do not convey the integrity of workmanship in the landscape. Therefore, the landscape does not retain integrity of workmanship.

Feeling

Feeling is the landscape's expression of the aesthetic or historic character of a particular period of time. The limited sense of historical feeling at the Bailly Homestead results from the retention of the overall environmental setting, the persistent pattern of the entry drive and building alignments, the presence of key buildings, and the limited intrusion of modern features. The lack of other historical landscape features from the period of significance is a perceptible void and results in the lack of integrity of feeling in the landscape.

Association

Association is the direct link between the important historic event or person and the landscape. The strong association of the Bailly Family with extant features like the buildings and the Entry Drive and Allée result in retention of integrity of association.

Contributing Features

Contributing features are individual elements and aspects that remain from the period of significance and contribute to the integrity of the property. These are categorized according to landscape characteristics. Non-contributing features are those that have been added to the study area since the end of the historic period. Some features that are non-contributing are compatible with the historic character of the property.

The list below enumerates the features of the cultural landscape that contribute to the historic integrity of the Bailly Homestead. Reference drawings identifying these landscape features are CLR Analysis Drawings: Existing Landscape (EL1) and Existing Landscape Contributing Features (EL2).

Natural Systems and Features
1. East Branch Little Calumet River

Topography
2. Homestead terrace with steep slopes 20 feet above floodplain

Spatial Organization and Land Use
3. Irregular alignment of buildings along a central drive

Views
4. Screened views from elevated Homestead complex toward bridge and Howe Road south of river
5. Screened views between Main House and river floodplain
6. View of Entry Drive and allée from Howe Road
7. View along Entry Drive and allée through site
8. View to Main House from Entry Drive
9. View to Main House from West Patio
10. View to Storehouse from Entry Drive

Vegetation
11. Mown lawn grounds
12. Tree allée (remnant)
13. Wooded ravine to west

Circulation
14. Howe Road
15. Entry Drive/Sauk Trail
16. East Patio of Main House
17. Brick sidewalk between Main House and Entry Drive
18. Masonry steps in lawn from Brick House

Buildings and Structures
19. HS-18 Main House
20. HS-19 Brick House (location post ca. 1904)
21. HS-20 Two-Story Log House (location post ca. 1904)
22. HS-21 Storehouse (probable location post ca. 1904)
23. HS-22 Chapel (location post ca. 1904)
24. Fieldstone retaining wall at Brick House
25. Concrete block retaining walls at Main House patio
26. Remnant well and windmill location northwest of Bailly House
27. Remnant cistern location south of Main House

Small-scale Features
28. Remnant fence lines along edge of ravine

Landscape Condition and Analysis

This section describes the existing condition and analysis of the Bailly Homestead landscape. The condition of contributing and non-contributing landscape features is assessed according to the landscape characteristics defined in the introduction to this chapter. The existing features of the Bailly Homestead are presented on CLR Analysis Drawings: Existing Landscape (EL1), Existing Landscape Contributing Features (EL2), and Existing Landscape Tree Inventory (EL3).

Natural Systems and Features

The Bailly Homestead study area is situated immediately to the north of the East Branch of the Little Calumet River, which drains to Lake Michigan via the Port of Indiana-Burns Waterway, located approximately five miles to the west. The study area is within the Coffee Creek Subwatershed of the Little Calumet River East Branch watershed.

In 2014, the Indiana Department of Environmental Management (IDEM) reported water quality impairments for nearly all portions of the East Branch of the Little Calumet River. Impairments included E. coli, nutrients, impaired biological communities, chloride, and dissolved oxygen. In response to pollution within the stream, a Watershed Management Plan was developed in 2015 by the non-profit organization Save the Dunes for the East Branch of the Little Calumet River. The river channel and banks are dynamic and show evidence of erosion accelerated by the presence of fallen trees. This biological debris creates pools that are beneficial for fish habitat but obstructs small watercraft. Due to the hydrological changes to the river and water quality impairments, the river is in generally poor environmental condition.

The river's general orientation and location of vegetated banks provides a historical reference to the period of significance for the Bailly Homestead. During the tenure of the Bailly family, the river provided secondary access to the site, fish for subsistence, and a picturesque setting where the family planted commemorative trees. Currently, the Little Calumet River creates opportunities for kayaking, fishing, and experiencing the setting of the Bailly Homestead (Figure 3.1). The river is retained today and, therefore, contributes to the historic character of the Bailly Homestead.

The Bailly Homestead lies within the section of the East Branch of the Little Calumet River (EBLC) classified as "Reach 2" in *The East Branch Little Calumet River Use Management Plan and Environmental Assessment*. This reach meanders through a riparian forest that provides overhanging vegetation habitat and woody debris. The river is incised and deeper here than it is upstream, but also has varying depths with pools and shallows. The river is slow moving with a substrate varying from sandy to mucky. The Management Plan provides valuable information that is quoted below for reference:[313]

[313] NPS, *The East Branch Little Calumet River Use Management Plan and Environmental Assessment*, Indiana Dunes National Lakeshore, July 2017, pp.19, 29-30.

Trail to Dunes Learning Center and Bailly Cemetery (Little Calumet River Trail System)

Trail to Bailly Homestead and Chellberg Farm Visitor Center Contact Station (Little Calumet River Trail System)

Wayfinding Sign
Trash receptacle
Wood bench
NHL Commemorative Stone and Plaque
Wayfinding Sign
Lawn
Picnic tables
Wood screen
Wayside
Trash receptacle
Embedded fence
Wayside
Light Pole
Firepit and log seating
HS-21 Storehouse
Daylilies
HS-20 Two-Story Log Building
Concrete well cover
Daylilies
Light Pole
Well
Wayside
Log cluster
HS-22 Chapel
Entry Drive
Daylilies
Brick walk
Light Pole
Concrete Block Wall
Concrete Patio
Light Pole
Daylilies
HS-18 Main House
Embedded fence
Wayside
Concrete walk
Wood steps
Concrete step
HS-19 Brick House
Embedded fence
Howe Road
Entry Drive/ Sauk Trail
Stone retaining wall
Daylilies
Pipe Outlet
Gate
Trail to River
Gate posts
Little Calumet River - East Branch
Bridge

640 635 630 625 620 615 610

Key
- Site Boundary
- Tree
- Dead Tree or Stump
- Planting Bed
- Picnic Table
- Concrete Paving
- Asphalt Paving
- Gravel Paving
- Brick Paving
- Building
- Trail

30 0 30 60 90 N
GRAPHIC SCALE - FEET, CONTOUR INTERVAL 5 FEET

Note: Drawing reflects June 2017 site conditions

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CADD: STA
TECH. REVIEW: GDV/BW
DATE: 05/07/18

SUB SHEET NO. EL1

TITLE OF SHEET
CLR ANALYSIS DRAWINGS
EXISTING LANDSCAPE
BAILLY HOMESTEAD
INDIANA DUNES NATIONAL LAKESHORE
PORTER, INDIANA

DRAWING NO. INDU 626 138628
PMIS/PKG NO. 20940
SHEET 4 OF 6

CULTURAL LANDSCAPE CONTRIBUTING FEATURES

Natural Systems and Features

1. East Branch Little Calumet River

Topography

2. Homestead terrace with steep slopes 20' above floodplain

Spatial Organization and Land Use

3. Irregular alignment of buildings along a central drive

Views and Vistas

4. Screened views from elevated Homestead complex from bridge and road south of river
5. Screened views between Main House and river floodplain
6. View of Entry Drive and allée from Howe Road
7. View along Entry Drive and allée through site
8. View of Main House from Entry Drive
9. View to Main House from east patio
10. View to Storehouse from Entry Drive

Vegetation

11. Lawn grounds
12. Tree allée (remnant)
13. Wooded ravine to west

Circulation

14. Howe Road
15. Entry Drive/Sauk Trail
16. East Patio of Main House
17. Brick walk between Main House and Entry Drive
18. Masonry steps in lawn from Brick House

Buildings and Structures

19. HS-18 Main House
20. HS-19 Brick House (location post ca. 1904)
21. HS-20 2-story Log House (location post ca. 1904)
22. HS-21 Storehouse (probable location post ca. 1904)
23. HS-22 Chapel (location post ca. 1904)
24. Fieldstone retaining wall at Brick House (possible)
25. Concrete block retaining walls at Main House patio
26. Remnant well and windmill location northwest of Main House
27. Remnant cistern location south of Main House

Small-scale Features

28. Remnant fence lines along edge of ravine

Trail to Dunes Learning Center and Bailly Cemetery (Little Calumet River Trail System)

Trail to Bailly Homestead and Chellberg Farm Visitor Center Contact Station (Little Calumet River Trail System)

HS-21 Storehouse

HS-20 Two-Story Log Building

HS-22 Chapel

HS-18 Main House

HS-19 Brick House

Howe Road

Trail to River

1 Little Calumet River - East Branch

Key

- Site Boundary
- Tree
- Dead Tree or Stump
- Planting Bed
- Picnic Table
- Concrete Paving
- Asphalt Paving
- Gravel Paving
- Brick Paving
- Building
- Trail

30 0 30 60 90

GRAPHIC SCALE - FEET, CONTOUR INTERVAL 5 FEET

N

Note: Drawing reflects June 2017 site conditions

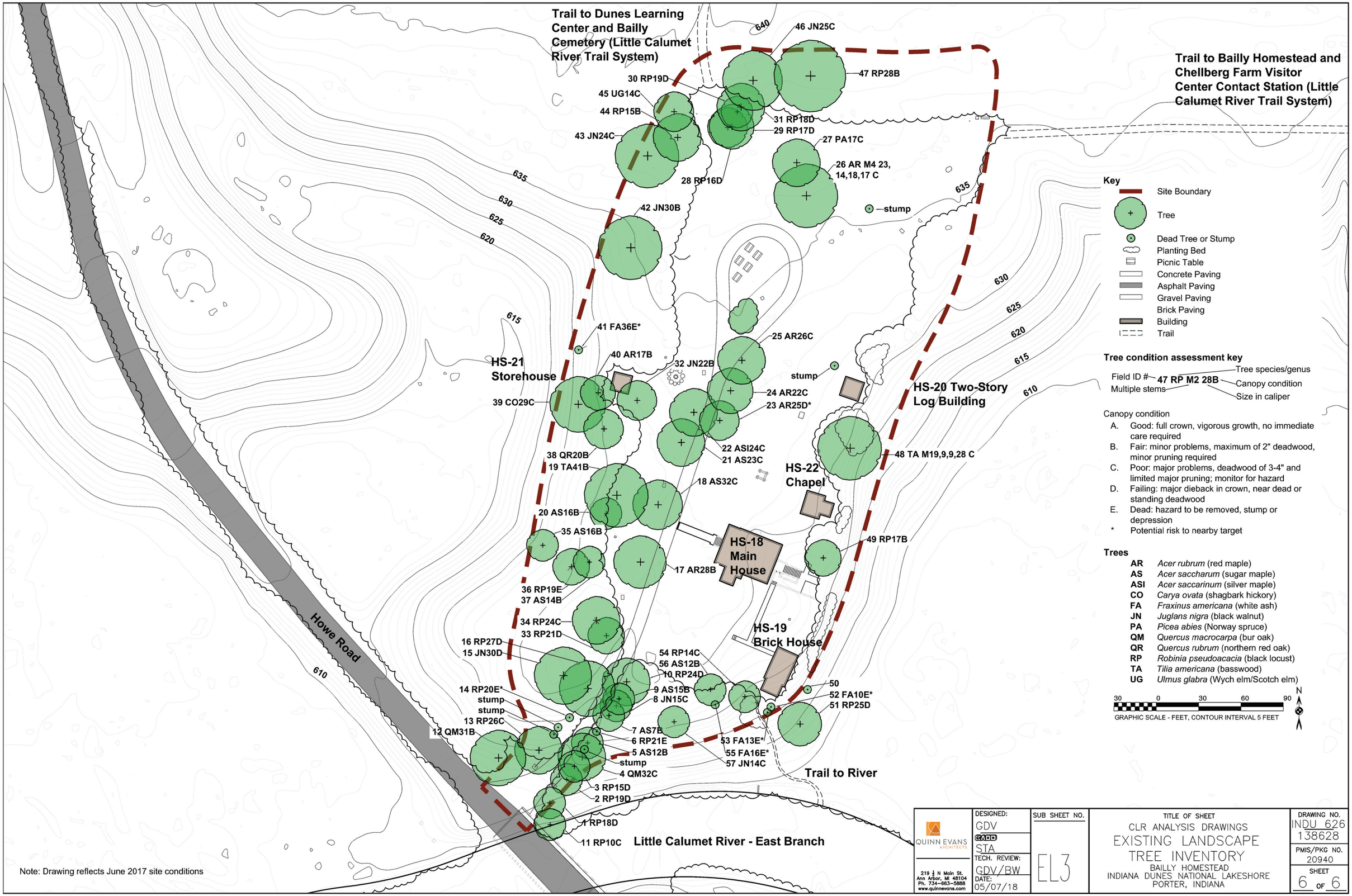
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SUB SHEET NO. EL2

TITLE OF SHEET
CLR ANALYSIS DRAWINGS
EXISTING LANDSCAPE CONTRIBUTING FEATURES
BAILLY HOMESTEAD
INDIANA DUNES NATIONAL LAKESHORE
PORTER, INDIANA

DRAWING NO. INDU 626 138628
PMIS/PKG NO. 20940
SHEET 5 OF 6



Note: Drawing reflects June 2017 site conditions

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SUB SHEET NO. EL3

TITLE OF SHEET
CLR ANALYSIS DRAWINGS
EXISTING LANDSCAPE TREE INVENTORY
BAILLY HOMESTEAD
INDIANA DUNES NATIONAL LAKESHORE
PORTER, INDIANA

DRAWING NO. INDU 626 138628
PMIS/PKG NO. 20940
SHEET 6 OF 6

The EBLC drains a total of 47,330 acres of land in Northwest Indiana, and makes up over 12 percent of Northwestern Indiana's Little Calumet-Galien watershed. ... Much of the EBLC's shape and general makeup (i.e. morphology) were significantly altered during agricultural and industrial development of the area. Specific modifications include channelization, filling of wetlands, ditching, placement of dikes, and dewatering. While many sections of the river are heavily modified, others that run through the National lakeshore maintain their natural sinuosity and connectivity to the floodplain.

… Reach 2 contains one of the longest unmodified sections of the EBLC. This section of the river maintains its natural connectivity with its floodplain and routinely spills it banks to fill that floodplain. While this section of the river is prone to flooding, the floodplain is confined within a forested dune landscape to the north and south which restricts the river to this corridor even under severe flooding. When this section of the river escapes its banks the water rapidly disperses into the floodplain and causes it to lose much of the energy seen in a more confined system. … The EBLC is a low energy system and lacks the energy to rapidly move moderately entranced woody debris. Consequently, many of the logjams in this section have remained stable for numerous years. … In addition to woody debris monitoring, extensive fish surveys were done as well as macroinvertebrate surveys. … Evaluation of these data showed no species or community level pre- or post-woody debris management effects on fish communities. No state or federally listed species are known to exist in the EBLC. Macroinvertebrates were evaluated using two differing approaches, Hester-Dendy samples and D-netting. …The most biological diverse habitat was root-mats while the most available habitat by density was woody debris. Removal of woody debris would directly impact the surface area available for macroinvertebrate colonization, however the sheer volume of woody debris available for colonization would hardly be impacted and the most diverse habitats, root mats, would be marginally impacted.



Figure 3.1. Fishing on the Little Calumet River near the entrance to the Bailly Homestead. View southwest. (QEA 2017)

Spatial Organization and Land Use

The Bailly Homestead study area consists of 2.7 acres on a low terrace above the Little Calumet River East Branch. The buildings, circulation routes, and other features that comprise the homestead are situated in an open clearing surrounded by closed canopy woodlands, and elevated approximately 20 feet above the river floodplain. The greatest concentration of historic features is in the southern portion of the study area, where the buildings, structures, and entry driveway are located. The northern portion of the study area consists primarily of open lawn, which is intersected at its northwest and northeast corners by hiking trails.

The primary organizational element of the study area is the driveway, which extends northeast from Howe Road. The road is lined by a partially complete allée of deciduous trees that demarcate the spaces to the east and the west of the road. The Brick House, Main House, Chapel, and Two-Story Log Building are oriented to face the driveway in an irregular row to the east of the route; the Storehouse faces onto the driveway from the west.

During the period of significance, the property was a trading post for the fur trade and later domestic estate with farming and timber harvesting operations. After a series of private uses as a convent, antique store, and restaurant, the study area became part of Indiana Dunes National Lakeshore in 1971. The site is open to visitors for education, interpretation, and recreation. Visitor access to the site is from the Bailly/Chellberg Contact Station, located 0.3 miles to the east of the Homestead. The study area is located along the Bailly/Chellberg trails, which also connect to the Chellberg Farm (0.4 miles to the northeast), the Bailly Cemetery (1.1 miles to the north), and the Indiana Dunes Environmental Learning Center (0.3 miles to the northwest). The Little Calumet River Trail extends west from the study area.

The alignment of buildings between the edge of the plateau and the central drive reflects the historic pattern of the site and contributes to historic character. Changes in land use from those of a residence and farm with occasional visitation to use of the property as a recreational and educational resource within the Indian Dunes National Lakeshore do not contribute to the historic significance of the property.

Topography

The Bailly Homestead study area is situated on deep soils of a low terrace that rises approximately 20 feet above the floodplain of the north of the East Branch of the Little Calumet River. Elevations range from approximately 640 feet above sea level (fsl) in the northwest to about 610 fsl in the southeast near the banks of the Little Calumet River. The core of the Homestead complex is at approximately 630 fsl.

Soils within the study area are Rawson loam, two to six percent slopes, which consist of deep, moderately well drained soils formed in loamy sediments and till on beach ridges, moraines, and outwash plains. Depth to water table is typically 18 to 36 inches for these soils.[314] Characteristic of prime farmland, the soils supported the particular types of forest communities and agricultural fields that were used by the Bailly family during the period of significance.

The Entry Drive climbs a short but steep grade to access the Bailly Homestead site. Deeply incised drainages cut through the terrace embankment to the east and west of the study area to reach the floodplain. To the north, the topography gradually rises, away from the river. Within the study area, the topography is generally flat. To the east of the gravel road near the Brick House and Main House, the topography slopes gently to the east, necessitating a series of retaining walls and steps to provide access to circulation routes and the basement level of the Main House. The topography represents that present during the period of significance and contributes to the historic character of the property.

[314] Natural Resources Soil Conservation Service, “Soil Survey of Porter County, Indiana,” US Department of Agriculture in cooperation with Purdue University, Agricultural Experiment Station and Indiana Department of Natural Resources, Soil and Water Conservation Committee, 1981; and Natural Resources Soil Conservation Service, “Web Soil Survey,” accessed June 2017, https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx.

Views

Site topography and the linear qualities of circulation define views within the Bailly Homestead. The presence of vegetation between the subject and object of visual relationships greatly influences the character of views within the homestead. Regardless of changes to landscape characteristics, views largely persist from the end of the period of significance (see EL2). Annotations on photographs taken shortly before and after 1918 suggest the location of important views on the site.[315]

Views to and from the Homestead on the plateau and locations along the river floodplain demonstrate seasonal change related to vegetation. Important screened views include views to the bridge and Howe Road south of the river and views from the Main House to the floodplain (Figures 3.2 and 3.3) These views change in opacity depending on the presence of leaves on the largely deciduous woodland of the hillside and lowland. The views from the elevated location of the Homestead complex are documented as important to the Bailly family referenced by annotated historic photographs, sketches, and oral history descriptions discussed in Chapter 2.

The patio east of the Main House continues to offers views to the adjacent Main House and Chapel as it did during the historic period (Figure 3.4). Photographed during the period of significance, the patio east of the Main House served as a place of congregation for the family.

Circulation features, principally related to the north-to-south orientation of the Entry Drive, organize many visual relationships on site. Four particular views related to the Entry Drive that were documented by historic photographs are evident today:

- View of the arcing Entry Drive and allée from the intersection at Howe Road (Figure 3.5)
- View through the site on the plateau along the Entry Drive (Figure 3.6)
- View toward the Main House down the brick walk from Entry Drive (Figure 3.7)
- View across turf to the Storehouse from the Entry Drive (Figure 3.8)

These views are significant because they represent the locations of the few historic photographs of the site from immediately before and after the period of significance. They focus on features of the Homestead that were important for the Bailly family or those immediately connected to the family such as the Entry Drive and Allée, the entrance to the Main House, and the Storehouse. Views of other locations of the Bailly Homestead documented in historic photographs do not remain from 1918 due to changes in the landscape over time. The structure of the extant historic views persists from the period of significance due to the enduring qualities of topography and the retention of surrounding forest, the open ground plane of turf on the plateau, drives, and walks. The historic character of views and visual relationships within the Bailly Homestead is variable from good to poor due to changes to other historic vegetation features and the loss of small scale features in the study area since 1918.

[315] Chapter 2 and Appendix A present photographs from the 1890s and 1920s that document the features of the Bailly Homestead around the period of significance.



Figure 3.2 Screened views southwest from the elevated Homestead complex to the bridge and road south of the river. (QEA 2017)



Figure 3.3 View southeast from the Main House to the river floodplain. (QEA 2017)



Figure 3.4 View northwest to Main House from east patio. (QEA 2017)



Figure 3.5 View northeast of Entry Drive and Allée from Howe Road. (QEA 2017)



Figure 3.6 View southwest along Entry Drive and Allée through site. (QEA 2017)



Figure 3.7 View southeast to Main House from Entry Drive. (QEA 2017)



Figure 3.8 View northwest to the Storehouse from Entry Drive. (QEA 2017)

Vegetation

Existing vegetation consists of mown lawn and individual canopy trees throughout the core of the study area. This area of open understory is surrounded by steeply sloped woodlands descending to the river floodplain. The opening of the Entry Drive is framed by a tightly spaced allée which blends into the adjacent deciduous forest. Remnants of domestic plantings have become naturalized within the edges of the forest.

Approximately 1.4 acres of mown lawn occupies the clearing surrounding the buildings and entry drive. The mown lawn is a turf combination of cool season grasses with broadleaf weeds. It is periodically trimmed, and has an uneven surface and some bare spots.

A total of 58 individual trees were assessed during the June 2017 field investigations using the *Comprehensive Condition Assessment Report – Tree* from the Olmsted Center for Landscape Preservation.[316] Selected trees within the clearing as well as along the edges of the deciduous forest were typically over 12-inch diameter at breast height (DBH). Common tree species include black locust (*Robinia pseudoacacia*), sugar maple (*Acer saccharum*), black walnut

[316] Olmsted Center for Landscape Preservation, *Comprehensive Condition Assessment Report – Tree* (Boston: Massachusetts, US Department of the Interior, National Park Service, Olmsted Center for Landscape Preservation, 2010).

(*Juglans nigra*), red maple (*Acer rubrum*), and white ash (*Fraxinus americana*). Seventeen trees were in good condition, 20 trees in fair condition, and 13 trees in poor condition. Eight of the surveyed trees were standing deadwood. Of the poor condition and dead trees, six pose a risk to nearby structures or features. The surveyed trees commonly supported extensive poison ivy (*Toxicodendron radicans*) and Virginia creeper (*Parthenocissus quinquefolia*) vines.

Within the clearing, trees located along the entry road form a partially intact allée. The remaining 16 trees include black locust, red maple, sugar maple, and bur oak (*Quercus macrocarpa*).

Remnants of ornamental plantings are located on the periphery of the clearing, and consist primarily of naturalized daylilies (*Hemerocallis* spp.) that have formed clumped groups around the edges of the deciduous forest. Groupings of daylilies are found to the northeast of the Two-Story Log Building; to the north of the Chapel; to the east of the Chapel; to the east of the Main House and Brick House; and to the southwest of the Brick House. Multiflora rose (*Rosa multiflora*) are located within the deciduous forest surrounding the homestead, though it is unknown if these roses or the daylilies are remnant plantings associated with the Bailly family.

Deciduous forest surrounds the clearing that contains the buildings and entry drive. It is comprised of a variety of species characteristic of mesic forests, as well as some invasive exotic species that primarily occupy the edges of the opening. Woody species observed during field investigations include red maple, ash species (*Fraxinus* spp.), sugar maple, bur oak, northern red oak (*Quercus rubra*), black locust, shagbark hickory (*Carya ovata*), serviceberry (*Amelanchier arborea*), American basswood (*Tilia americana*), hawthorn (*Crataegus* spp.), mulberry (*Morus alba*), black walnut, black cherry (*Prunus serotina*), boxelder (*Acer negundo*), elm (*Ulmus* spp.), hackberry (*Celtis occidentalis*), spicebush (*Lindera benzoin*), sumac (*Rhus* spp.), elderberry (*Sambucus* spp.), multiflora rose, dogwood (*Cornus* spp.), raspberries and blackberries (*Rubus* spp.), and currants (*Ribes* spp.). Herbaceous species include dock (*Rumex* spp.), burdock (*Arctium* spp.), common nettle (*Urtica dioica*), wild ginger (*Asarum* spp.), false Solomon's seal (*Maianthemum racemosum*), wild onion (*Allium* spp.), bedstraw (*Galium* spp.), trillium (*Trillium* spp.), and mayapple (*Podophyllum peltatum*). Common vines are poison ivy, Virginia creeper, wild grape (*Vitis* spp.), bristly greenbrier (*Smilax tamnoides*), and invasive oriental bittersweet (*Celastrus orbiculatus*).

A vegetation survey within the Indiana Dunes National Lakeshore was conducted by the USGS-NPS Vegetation Mapping Program in 2009. This study identified several related forest types in the immediate vicinity of the study area: Northeastern Modified Successional Forest (deciduous phase), Midwestern White Oak–Red Oak Forest (white oak–red oak phase), Maple–Ash–Elm Swamp Forest, and Mixed Deciduous Wetland Forest (Figure 3.9).[317]

[317] Kevin Hop, Sara Lubinski, and Jennifer Dieck, USGS, and Jim Drak and Shannon Menard, NatureServe, *National Park Service Vegetation Inventory Program, Indiana Dunes National Lakeshore, Indiana* (La Crosse, Wisconsin: US Department of the Interior, US Geological Survey, Upper Midwest Environmental Sciences Center, 2009).

1. Northeastern Modified Successional Forest is located around the edges of the mown lawn clearing within the study area, and continues along the top of the ridge that extends to the north. Within Indiana Dunes National Lakeshore, this forest type typically occurs in level upland areas and level, drained bottomlands. It is a secondary successional community that generally forms on old fields or former home sites. The canopy is dominated by red maple and ash species; the shrub layer is composed of young maple and ash species, with a variety of native and nonnative shrubs including dogwood, spice bush, cane fruit such as raspberries and blackberries, and nonnative species including multiflora rose, Japanese barberry (*Berberis thunbergii*), and oriental bittersweet. Herbaceous species include poison ivy, Virginia creeper, jumpseed (*Polygonum virginianum*), and invasive garlic mustard (*Alliaria petiolata*).[318]

2. Midwestern White Oak –Red Oak Forest (white oak – red oak phase) is mesic oak-hickory forest located along the south-western edge of the mown lawn clearing, immediately adjacent to the study area. Within Indiana Dunes National Lakeshore, this forest type is typically located on glaciated, rolling topography in a variety of mesic soils. The forest type is interrupted by the presence of abandoned roads, trails, and homesites, and therefore is somewhat intermixed with the Northeastern Modified Successional Forest that has reforested disturbed areas. The canopy of Midwestern White Oak – Red Oak Forest is dominated by white oak (*Quercus alba*), northern red oak, shagbark hickory, and pin oak (*Quercus palustris*); the canopy also includes black walnut, black oak (*Quercus velutina*), black cherry, American basswood, slippery elm (*Ulmus rubra*), serviceberry, hawthorn, red maple, American hornbeam (*Carpinus caroliniana*), hop hornbeam (*Ostrya virginiana*), and flowering dogwood (*Cornus florida*). The shrub layer includes spicebush, American hazelnut (*Corylus americana*), gray dogwood (*Cornus racemosa*), prickly gooseberry (*Ribes cynosbati*), blueberry (*Vaccinium* spp.), and nonnative species including multiflora rose, oriental bittersweet, honeysuckle (*Lonicera* spp.), and Siberian elm (*Ulmus pumila*). The sparse herbaceous layer may include Jack-in-the-pulpit (*Arisaema triphyllum*), avens (*Geum* spp.), bedstraw (G*alium* spp.), poison ivy, and garlic mustard.[319]

3. Maple – Ash – Elm Swamp Forest is located in low-lying areas to the east and west of the Bailly Homestead study area. The canopy of this bottomland hardwood forest is dominated by white ash, red maple, and silver maple, and may also include black walnut, eastern cottonwood (*Populus deltoides*), black cherry, white oak, swamp white oak (*Quercus bicolor*), red oak, black oak, slippery elm, and black willow (*Salix nigra*). Shrub species include small ash and maples, hawthorn, pawpaw (*Asimina triloba*), buttonbush (*Cephalanthus occidentalis*), spicebush, and gray dogwood. The herbaceous layer is variable. Nonnative species within this forest type typically include Japanese

[318] Hop et al., *NPS Vegetation Inventory Program, Indiana Dunes National Lakeshore*, B-14
[319] Hop et al., *NPS Vegetation Inventory Program, Indiana Dunes National Lakeshore*, B-17

barberry, multiflora rose, and Kentucky bluegrass (*Poa pratensis*).[320]

4. Mixed Deciduous Wetland Forest is located immediately west of the Bailly Homestead study area in a low-lying area south of the road. This forest type is adjacent to the Maple–Ash–Elm Swamp forest type, and is comprised of a vegetation mix similar to the Maple–Ash–Elm Swamp; however, the presences of numerous invasive exotic plant species are present within the Mixed Deciduous Wetland Forest indicate past disturbance in these areas. Dominant invasive exotic species include honeysuckle, multiflora rose, and garlic mustard.[321]

Contributing vegetation of the Bailly Homestead includes the open ground plane of lawn, the allée of the Entry Drive, and the woodland surrounding the core of the site. These features persist from the period of significance and provide historic character to the site today.

[320] Hop et al., *NPS Vegetation Inventory Program, Indiana Dunes National Lakeshore*, B-37
[321] Hop et al., *NPS Vegetation Inventory Program, Indiana Dunes National Lakeshore*, B-121

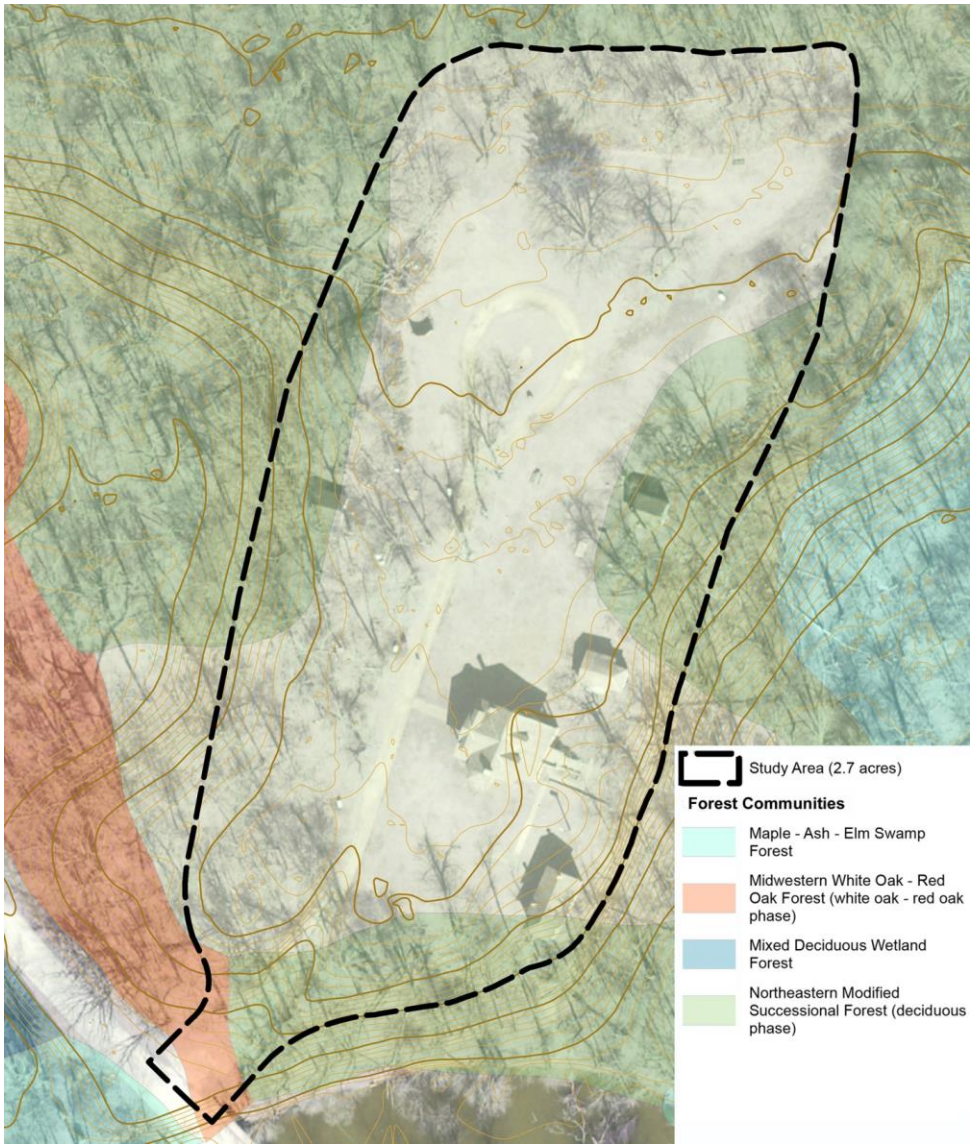


Figure 3.9. Bailly Homestead Forest Communities. (QEA 2017, from Hop et al., NPS Vegetation Inventory Program, INDU, 2009)

Circulation

Access to and within the Bailly Homestead is via vehicular and pedestrian circulation routes. The primary visitor access to the site is from the Little Calumet River trail, which loops between the Bailly Homestead, Chellburg Farm, Bailly Cemetery, and Dunes Learning Center. Vehicular access is from Howe Road, and is currently restricted to NPS staff.

Vehicular Routes

Howe Road is located immediately to the southwest of the study area. It is a double lane asphalt road extending south from Mineral Springs Road to the north of the study area. A bridge spans across the Little Calumet River East Branch to the southeast of the intersection between Howe Road and the driveway. On the opposite side of the bridge from the Bailly Homestead, Howe Road is widened to provide an informal parking area.

Vehicular access to the Bailly Homestead site is provided by the Entry Drive that extends north from Howe Road, terminating in a turnaround near the north end of the study area (Figure 3.10). The Entry Drive overlays the northern branch of the Sauk Trail which predated the homestead. The driveway is a gravel-paved, single lane route with an approximate width of 9 feet. Several remnant trees of the historic allée line the Entry Drive (Figure 3.11). The turnaround has an interior diameter of 46 feet (Figure 3.12).



Figure 3.10. Entry Drive at Howe Road. View northeast. (QEA 2017)



Figure 3.11. Gravel Entry Drive and remnant allée. View southeast. (QEA 2017)



Figure 3.12. Gravel turnaround at the terminus of the entry driveway. View south. (QEA 2017)

Pedestrian Routes

A brick sidewalk connects between the Main House and the driveway (Figure 3.13). The sidewalk extends in a straight line approximately 28 feet from the stairs on the west side of the Main House to the gravel driveway. It is comprised of bricks arranged in a herringbone pattern, edged with decorative angled bricks set on end. The bricks were relaid with original bricks in the original historic pattern by the NPS in 1976. The sidewalk begins at a widened rectangular throat at the base of the stairs measuring 2'-9" by 7'-6." The main portion of the sidewalk ranges in width from 5'-7" to 5'-9." At the gravel driveway, the sidewalk terminates in a row of parallel bricks edged with irregular limestone bocks. The brick sidewalk is generally in fair condition. While the path is generally level, there is some irregular settling, particularly near the stairs.

A concrete patio is located on the east side of the Main House (Figure 3.14). The patio is comprised of a series of concrete sidewalks connecting between the stairs on the east side of the Main House, a door on the south side of the Main House, and the surrounding lawn. It is framed by a series of low concrete walls that form planting beds and retain the earth to provide a relatively level area at the back of the house. At the southwest corner of the patio, a short flight of concrete stairs connects to a sidewalk that extends south. The patio is in fair condition. The concrete panels that make up the surface of the patio have gaps up to 1-inch between panels, and vertical displacement of up to 1.5-inches. Concrete panels on the north and east sides of the patio are partially buried by soil and vegetation.

A concrete sidewalk extends 44 feet south from the patio, intersecting with another segment of concrete sidewalk that extends west from the Brick House (Figure 3.15). The sidewalk is irregularly scored, and has a variable finish indicative of patching or replacement at some time in the past. This segment of sidewalk is in fair condition. Though cracking is present across the slabs, there are no major gaps or rises in the pavement.

A concrete sidewalk extends 29 feet 9 inches west from the Brick House, intersecting with another segment of concrete sidewalk extending south from the patio. This segment of sidewalk is in fair condition, with a 1.5" gap between panels at three locations and up to 1-inch vertical separation in two locations. On its west end, the sidewalk terminates at two concrete steps within the lawn. One of the steps is buried, and only the tread is visible on grade with the sidewalk. The steps have a tooled edge and chipped outer edges, and are in fair condition. At its east end, the sidewalk terminates at two narrow wooden steps that provide access to the Brick House.



Figure 3.13. Brick sidewalk between entry driveway and Main House. (QEA 2017)



Figure 3.14. Concrete patio on the east side of the Main House. (QEA 2017)



Figure 3.15. Concrete sidewalk between Brick House and Main House. (QEA 2017)

Adjacent Trails

Bailly Homestead is accessed via the Little Calumet River Trail System, which is the primary route that visitors use to hike to the site. The trail connects through the site on the northwest and northeast corners of the study area.

To the northeast, a 0.3 mile long hiking trail provides access to the Bailly Homestead and Chellburg Farm parking area and visitor contact station. This facility includes parking for cars and buses, restrooms, and an information board listing current park activities. The trail has a mulched surface, and crosses low areas via a short bridge and a boardwalk.

To the northwest, the hiking trail connects to the Dunes Learning Center and to the Bailly Cemetery. The Dunes Learning Center is located on the grounds of the former Good Fellow Club Youth Camp, 0.3 miles to the northwest of the Bailly Homestead. A narrow, unpaved trail segment connects over generally flat terrain between the Bailly Homestead and the parking area for this site. The Bailly Cemetery is located approximately 0.8 miles to the north of the Bailly Homestead, along a developed hiking trail that is paved with mulch, crushed fines, or boardwalks as necessary to navigate the conditions of the landscape.

A small number of vehicular and pedestrian circulation routes contribute to the historic character of the Bailly Homestead. Howe Road, the main public road along the Little Calumet River generally follows the route that existed in 1918 and the intersection of Howe Road with the gravel Entry Drive remains in the historic location north of the bridge. The alignment of the Entry Drive is fundamental to maintaining the historic spatial organization of the Homestead and conveying the character of the property. Historic pedestrian circulation features include the concrete east patio of the Main House, the brick sidewalk between Main House and Entry Drive, and masonry steps in lawn from brick house. These features remain intact in their original form and materials since 1918.

Buildings and Structures

Buildings and structures within the study area include a series of masonry retaining walls and five buildings including the Main House (HS-18), Brick House (HS-19), Two-Story Log Building (HS-20), and Storehouse (HS-21), and Chapel (HS-22). The retaining walls associated with the Main House and Brick House are discussed in this section while the buildings are described in Chapter 4. Other structures of the Bailly Homestead include a concrete cover over a historic well and non-extant windmill location northwest of the Main House and the clay pipes indicating locations of cisterns south of the Main House.

An L-shaped low wall retains the earth off of the southwest corner of the Brick House (Figure 3.16). The wall is constructed of fieldstone set on a concrete slab. At the Brick House, the wall is 14-inches tall, and gradually decreases to a height of 8-inches at its far end. The wall is in fair condition. Though some stones and mortar are missing from the top course of the wall, it appears to be stable.

A series of low walls frame the patio on the east (back) side of the Main House (Figures 3.17-3.20). The walls are typically constructed of concrete block with a decorative facing topped by a concrete cap, similar to the concrete block that forms the lower level of the Main House. Within this area, there are three primary retaining walls: along the north side of the patio, forming a planting bed along the staircase; along the west side of the patio, forming a planting bed along the Main House; and along the south side of the patio, retaining the slope between the Main House and the Brick House.

The walls are in poor to fair condition. The wall that forms the west side of the patio is in fair condition. This wall exhibits limited wear, staining, and moss growth. The wall along the north side of the patio is in fair condition. In some areas, the wall has missing mortar, and it exhibits some staining and moss growth. It appears to be separating slightly from the staircase and Main House. The wall along the south side of the patio is in poor condition. The retaining wall is failing, and has bowed inward toward the patio. In some segments of the wall, the facing has spalled from the concrete block. Repointing is required in numerous areas where mortar is missing. The concrete caps are cracked and offset from the wall.

A concrete well cover is located to the southwest of the Two-Story Log Building (Figure 3.21). The cap measures 51.5”x39” and is in poor condition. It is extensively cracked, and the finished surface has almost entirely worn off. The windmill that was historically associated with the well is not extant.

Historic buildings and structures contribute to the historic character of the Bailly Homestead. Extant buildings with similar forms and in the approximate locations as they were in 1918 include the Main House, Brick House, Two-Story Log Building, Storehouse, and Chapel. The fieldstone wall south of the Brick House appears to relate to grade modifications necessary for the relocation of the Brick House in 1904 and expansion in 1908. Concrete walls of the east patio of the Main House are in their historic location in this place of respite for the Bailly family. They contribute to the unique, historic character of the Main House. Other contributing structures include the surface features that indicate the location of the well and windmill location northwest of Main House and cistern locations south of Main House. These features date to the period of significance and contribute to the significance of the Bailly Homestead.



Figure 3.16. Low fieldstone and concrete retaining wall southwest of Brick House. (QEA 2017)



Figure 3.17. Concrete retaining wall along the west side of the Main House patio. (QEA, 2017)



Figure 3.18. Concrete retaining wall along the north side of the Main House patio. (QEA 2017)



Figure 3.19. Concrete retaining wall on south side of Main House patio. (QEA 2017)



Figure 3.20. Poor condition segments of concrete retaining wall on south side of Main House patio. (QEA 2017)



Figure 3.21. Concrete well cover. (QEA 2017)

Small-scale features

The Bailly Homestead study area contains numerous small-scale features and furnishing. These features are displayed and labeled on EL1. Small-scale features include remnant fences, a concrete cap associated with the well, scattered bricks, the NHL commemorative stone and plaque, light poles, waysides, picnic tables, log seating areas, a fire pit, a wood fence/screen, wayfinding signs, trash receptacles, a gate, and a wood bench. The following table provides descriptions of contributing and non-contributing small-scale features. All but small-scale features except for remnants of fences are recent additions for interpretation, wayfinding, and visitor comfort at the Bailly Homestead.

Feature	Description	C/NC	Rationale
Light Pole (4)	Four wood light poles are located within the study area: north of the Brick House, south of the Two-Story Log Building, north of the Storehouse, and west of the gravel road from the Main House (Figure 3.22). The utility poles are typically constructed of 8x8 lumber posts with a rectangular wooden mount supporting the light fixture. The light poles are in fair condition, with some weathering. Two of the poles have been overgrown with vines.	NC	NPS addition to site.
Wayside (4)	Four interpretive wayside panels are located within the study area: south of the trail to the contact station, east of the Storehouse, west of the Main House, and west of the Brick House (Figure 3.23). The waysides address the topics of “The Calumet Region, 1822-1835;” “Highways of the Past;” “The Bailly Homestead;” and “Joseph Bailly, Fur Trader.” The waysides typically consist of a 24” x 36” panel supported on 4” square metal posts. The waysides are in fair condition, and exhibit some rust.	NC	NPS addition to site.

Feature	Description	C/NC	Rationale
Picnic table (5)	Five picnic tables are located within the center of the gravel turnaround (Figure 3.24). The picnic tables are metal framed with 9”x71” wood seats and 28.5”x71” wood table tops. The picnic tables are in good condition.	NC	
Log seating cluster near Storehouse	A log seating cluster surrounding a fire pit is situated immediately to the east of the Storehouse (Figure 3.25). The seating consists of ten irregularly sized tree stumps situated in a rough circle approximately 9-12 feet in diameter. The log seating is in good condition.	NC	NPS addition to site.
Fire pit	A fire pit lined in stones is located in the center of the log seating cluster to the east of the Storehouse (Figure 3.25). The fire pit is approximately three feet in diameter and is in good condition.	NC	NPS addition to site.
Log cluster near Chapel	A display of log construction is located immediately to the west of the Chapel (Figure 3.26). The log cluster consists of a single-layer log cabin base measuring approximately seven feet square. Four other notched log pieces are located in the vicinity. This is a temporary display.	NC	NPS addition to site.
Wood screen	A three-panel wood screen is located to the west of the gravel turnaround (Figure 3.27). The individual panels typically measure 99”x49.5”. The screen is painted on its south side, and is in good condition.	NC	Recent addition to site.

Feature	Description	C/NC	Rationale
Wayfinding sign (2)	Two wayfinding signs are located within the study area: at the northeast corner of the study area near the entrance to the trail to the Bailly Homestead and Chellberg Farm visitor contact station (Figure 3.28), and at the northwest corner of the study area near the entrance to the trail to the Bailly Cemetery (Figure 3.29). The signs are typically 7”x14” and are supported on 4x4 lumber posts with a beveled top. The trail sign on the northeast side of the site is in good condition, and the trail on the northwest side of the site is in poor condition.	NC	NPS addition to site.
Trash receptacle (2)	Two wood and metal trash receptacles are located in the study area: within the gravel turnaround, and at the northeast corner of the study area near the entrance to the trail to the Bailly Homestead and Chellberg Farm visitor contact station (Figure 3.30). The receptacles consist of a wooden base measuring 23.5” square, with a bearproof metal top. The receptacles are in good condition.	NC	NPS addition to site.
National Historic Landmark commemorative stone and plaque	A stone with a plaque is located in the northeast corner of the site (Figure 3.31). Attached to the top of the stone is a brass plaque commemorating the NHL status of the Bailly Homestead. The stone and plaque are in good condition; however, they were partially buried by a pile of mulch at the	NC	Recent addition to study area.

Feature	Description	C/NC	Rationale
	time of the 2017 field investigations. It is inappropriate for maintenance staff to deposit much on or near commemorative markers, interpretive and wayfinding signage, or other important site features.		
Wood bench	A wood bench is located at the northeast corner of the study area near the entrance to the trail to the Bailly Homestead and Chellberg Farm visitor contact station (Figure 3.32). The bench measures 15” wide, 71” long, and 2” tall. It is in fair condition, with some moss growth.	NC	NPS addition to site.
Wire fence remnants	Several remnants of historic fences are located along the western side of the study area (Figure 3.33, EL 2, and EL 3). The wire fences are embedded in four trees along the top of the ridge. The fence is typically woven wire mesh with ornamental wire knots binding the strands of wire.	C	Early twentieth century farm fences were likely present in 1918.
Gate	A gate located immediately to the north of Howe Rd restricts access to the site’s gravel entrance road (Figure 3.34). It consists of two triangular wood gates arranged on the east and west sides of the road, situated on concrete bases. The gate is in good condition.	NC	Recent addition to study area.
Scattered bricks	Several bricks are scattered around the homestead, and are typically embedded within the lawn. The bricks do not appear to be associated with any other features.	NC	Not associated with known features and of unknown provenance.



Figure 3.22. One of four wood light poles (typical). (QEA 2017)



Figure 3.23. Interpretive wayside (typical). (QEA 2017)



Figure 3.24. Picnic table (typical). (QEA 2017)



Figure 3.25. Log seating cluster and fire pit in front of Storehouse. (QEA 2017)



Figure 3.26. Log cluster and in front of Chapel. (QEA 2017)



Figure 3.27. Wood screen north of the Storehouse. (QEA 2017)



Figure 3.28. Wayfinding sign to Bailly/Chellberg Farm Contact Station. (QEA 2017).



Figure 3.29. Damaged wayfinding sign to Bailly Cemetery. (QEA 2017)



Figure 3.30. Trash receptacle (typical). (QEA 2017)

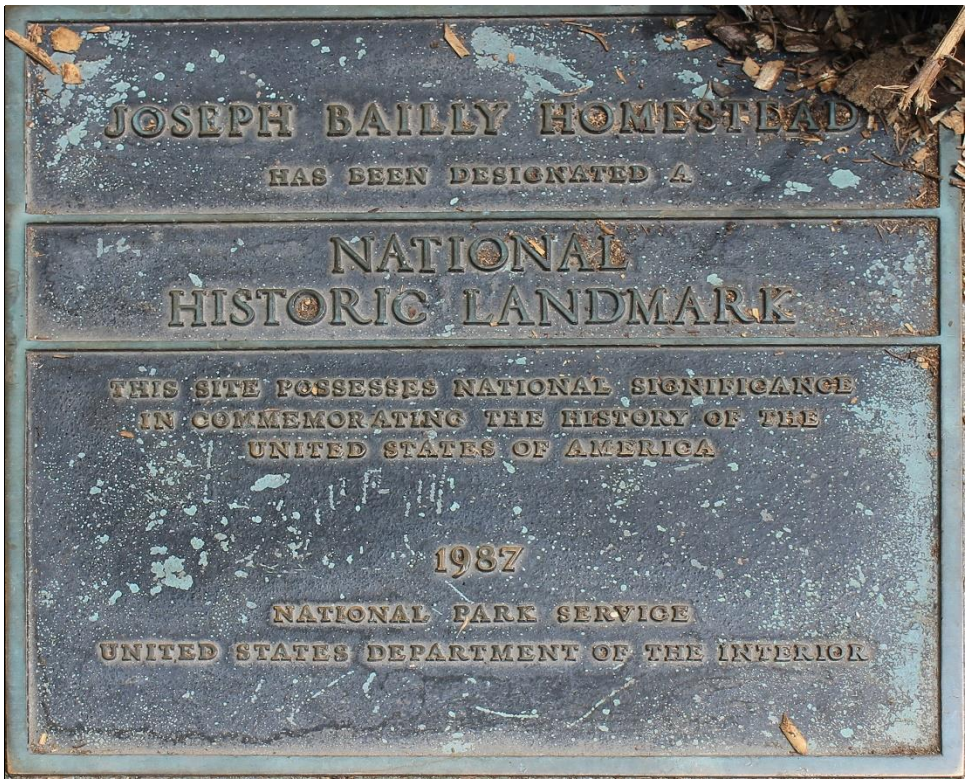


Figure 3.31. National Historic Landmark commemorative stone and plaque. (QEA 2017)



Figure 3.32. Wood bench and trash receptacle. (QEA 2017)



Figure 3.33. Wire fence remnant embedded in dead ash tree near the Storehouse. (QEA 2017)



Figure 3.34. East side of gate to entry drive, immediately north of Howe Road. (QEA 2017)

Archeological Sites

Several archeological investigations have been conducted at the Bailly Homestead since the Park was established in 1971. Overall, the site has low density of cultural remains for an archeological site and may retain few elements that are unexcavated or impacted from more recent developments.[322] In addition to known settlements in the nineteenth and twentieth centuries, evidence of cultural occupations ranges from late-Pleistocene Paleoindian materials to Archaic and Middle Woodland occupations.[323] The extent of earth moving, building relocations, and trenching for studies using backhoes as well as for septic drainage have made impacts on the archeological context of the Bailly Homestead.[324]

[322] Mark R. Schurr and Joshua J. Wells, Geophysical Surveys and Excavations at the Bailly Homestead Site, Indiana Dunes National Lakeshore (Lincoln, Nebraska National Park Service, Midwest Archeological Center, 2014).

[323] Dawn Bringelson and Jay T Sturdevant, *An Archeological Overview and Assessment of Indiana Dunes National Lakeshore, Indiana (*Lincoln, Nebraska: Midwest Archeological Center Technical Report No. 97. National Park Service, Midwest Archeological Center, 2007); Jay T. Sturdevant and Dawn Bringelson, Archeological Inventory and Testing at Sites Along the Dunes Creek Corridor 2002-2005, Indiana Dunes National Lakeshore, Porter County, Indiana: Midwest Archeological Center Technical Report No. 101 (Lincoln, Nebraska: National Park Service, Midwest Archeological Center, 2007).

[324] Fredrick Limp*,* The Bailly Site: An Archaeological Study of an Early Historic Homestead in the Calumet, (Bloomington, Indiana: Glenn A. Black Laboratory, Indiana University, 1974).

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Bailly Homestead, view looking northeast. (STRATA 2017)

4 BUILDING EXISTING CONDITIONS AND ANALYSIS

Chapter 4 | Buildings Existing Conditions and Analysis

This section of the report evaluates the existing conditions of the exterior and interior of each of the five buildings at the Bailly Homestead and establishes the extent of original remaining fabric to form a basis for future treatment recommendations. The period of significance begins ca. 1822, when Joseph and Marie Bailly established the homestead, and ends in 1918. Many alterations have been made to the buildings during and after the period of significance. These alterations are discussed in the Chapter 2 Building Chronologies section, as well as throughout this section of the report.

The existing condition drawings directly follow this section. Wood species testing for the purposes of structural assessment may be found in Appendix F. The hazardous materials investigation (asbestos and lead-based paint) of the existing house was also completed in June 2017 and is in Appendix G.

Drawings completed by the National Park Service (NPS) with regards to the repair and rehabilitation of the buildings in 1975 were updated to reflect the as-built work in 1977. These drawings can be found in Appendix D and are very useful for determining the scope of the very complicated NPS construction projects. In addition, a Summary of Alterations was prepared in 1977, which is in Appendix C. Together, these give a good summary of the NPS scope of work, but it should be noted that these are not comprehensive, and the work was not well documented photographically. Maintenance and repairs to all of the buildings has occurred regularly since 1976, which has not always been documented in the park maintenance files.

The Existing Conditions section of this report is organized, as follows: Discussion of materials (logs, chinking and daubing, and windows); Main House HS-18; Brick House HS-19; Two-Story Log House HS-20; Storehouse HS-21; and the Chapel HS-22. Both the exterior and interior conditions of these spaces is discussed and the character defining features of each building are presented at the end of each section. A review of existing conditions was completed for architectural, structural, mechanical, and electrical systems for most structures. Hazardous materials testing was done for the Main House and Brick House only.

Log Construction

When the Bailly Family settled in this area, logs were plentiful and provided an immediate resource used to construct vernacular log structures. Log structures were used for living accommodations, as well as for outbuildings and other support structures. Many of these early log structures were small and were able to be relocated when necessary.

The Bailly Homestead contains four extant horizontal log structures; the Main House HS-18, the Two-Story Log House HS-20, the Storehouse HS-21, and the Chapel HS-22. The logs are exposed and are currently visible on the exterior and interior of all of the structures, except for the Main House. The Main House is clad with wood siding and has interior plastered walls. The origin and histories of the three outbuilding structures are not well recorded. Since the early years of the homestead, combinations of salvaged log outbuildings were used to construct the Chapel, Storehouse and Two-Story Log House structures, as was documented orally by the Howe Family. The NPS has also used salvaged logs from other historic structures in Indiana, as well as old power poles for replacement logs.

The sophistication of the log construction involved in the four extant log structures in indicative of the use and value of the structures. Great skill was taken to produce a more sophisticated hewn-log structure, with squared logs and true corners, as witnessed with the Main House. The two-and-one-half story log structure would have been imposing and would have reflected Bailly's status as a wealthy and respected fur trader and entrepreneur. Additional outbuildings vary in style and construction, as would be consistent for secondary and tertiary structures. At one time, there were several more log structures surrounding the immediate homestead.

> *These men…must have been highly skilled and must have possessed considerable expertise because their task required them to use knowledgeably no fewer than seventy-six tools. Clearly the substantial log houses that dot the landscape today were not simply carved out of the wilderness by a long, rugged pioneer with a flintlock ion one hand and an axe in the other. Rather log house builders were carpenters with chests full of tools and equipment, a large burden of civilizing machinery. The log house…should be appreciated as a refined statement of rural society and should no longer be seen as the meager or crude response of pioneers to the threatening wilderness…The repeated occurrence of square corners and level foundations is…not as the result of luck but as the results of the deliberate use of measuring devices like squares, rulers, straight edges, and levels.*[325]

Log structures are typically referred to by their type of construction configuration and building height. A building which is a single 'pen' or 'crib' contains four outer log walls, connected at the corners. The interior layout may contain one or more rooms, divided by non-log walls. All of the Bailly Homestead structures are single 'pen' type. Log structures at Bailly are one-story, one-and-one-half story, and two-and-one-half story log structures.

[325] Upton, Dell, and Warren E. Rogers. "The Tools Used in Building Log Houses in Indiana." *Common Places: Readings in American Vernacular Architecture,* Univ. of Georgie press, 1986, p. 182.

Typical native trees that would have been felled for the log structures may have included white oak, which was abundant in the upland watershed of the Calumet River, as its resistance to decay and its strength were ideal for log construction. Other trees may have included black walnut, black oak, northern red oak, sugarbark hickory, American beech, white ash, and American or slippery elm. Log structures typically contain several species of trees. These trees would have been harvested from the surrounding area. The longer and straighter logs were preferred. The logs were typically debarked and shaped to fit the walls. There are a few logs in the chapel which still have intact bark. Roofing members were also constructed of logs, called pole rafters when sloped, or purlins when laid perpendicular to the gable. Dendrochronology or wood species testing of the existing log structures could be done to have a better understanding of what species were used or preferred for construction. Also, dendrochronology testing may be able to identify the year when the trees were felled, essentially identifying when the structures were originally constructed.

Notching

Corner notching is a feature of log structures that can indicate characteristics, such as origin or ethnicity of construction, and structural stability (Figure 4.1). The corner notching is visible on three of the Bailly log buildings, but not on the Main House. The corner notching style varies at each structure, including hybrids of notches at the same corner. This variety in notching styles may indicate the presence of replacement logs over time. The types of notching that exist include: saddle notch; diamond notch; ‘V’ notch; and some are double-notched, while others are single-notched. The Storehouse is predominantly of ‘saddle’ notch construction. The three outbuildings have extended ends of the logs exposed, which are called ‘crowns.’ These are susceptible to deterioration through moisture and sun exposure, and insect infestation. A few corners, such as at the Chapel, have the corners, or crowns, covered and protected with vertical trim boards.

Log Shapes

The shapes of the logs vary between structure, as well. Rounded logs produced a round exterior and round interior finish and are typically associated with a more secondary, hastily-built or temporary structure. Hewn or squared logs produce flush interior and exterior surfaces that are more uniform to receive vertical furring for installation of cladding and/or lath and plaster. Hewn log structures were likely intended to be more permanent structures or houses, as there was more effort involved in shaping the logs. Some of the outbuilding exterior logs are round, as are most of the logs on the Storehouse. The Two-Story Log House and the Chapel contains a combination of rounded and squared logs. The exposed interior logs of the Storehouse are rounded, while the interior surface of the logs of the Two-Story Log structure are squared. The interior logs at the chapel are round, but have the surfaces flattened, as needed to create a good furring surface for the non-extant wood lath and plaster walls. The Main House contains squared logs at the exterior and interior, often referred to as hewn timber, as this structure has always been clad on the exterior, and was later lathed and plastered on the interior.

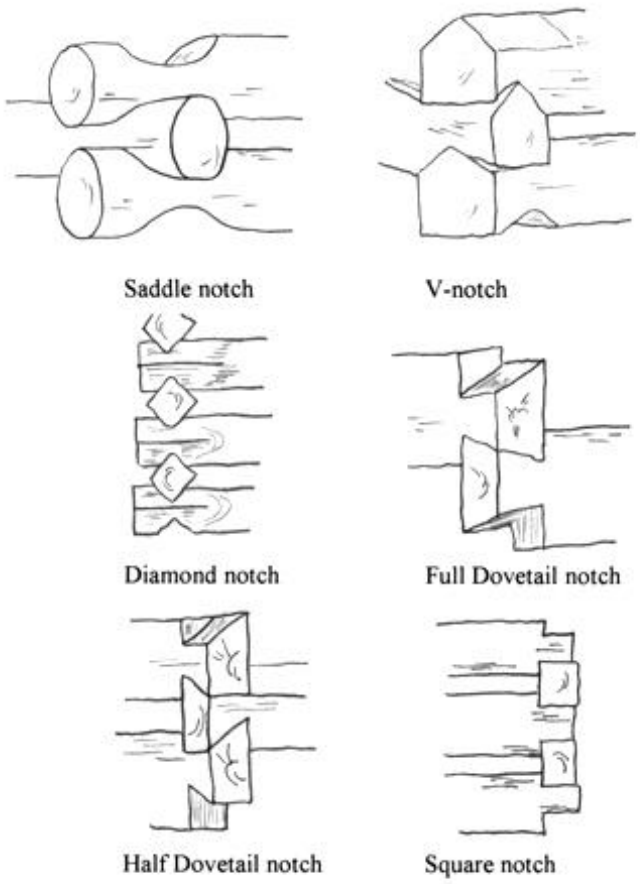


Figure 4.1. Log structure corner notching diagrams. www.prepare-and-protect.net/2014/04/cabin-corners/ accessed Aug. 7, 2017)

Replacement Logs

These buildings contain a significant amount of replacement logs. The Storehouse, Chapel and Two-Story Log buildings were completely dismantled in 1976-77 and all of the deteriorated logs were replaced. Detailed record drawings were found in the park files, which document the work and replacement logs for each structure. This work is further discussed in the narrative existing conditions section for each respective building. Replacement log species also vary, and there is also a combination of salvaged historic logs from other historic sites and salvaged power poles. These power pole replacement logs are very noticeable, as the uniformity, texture, and tree ring structure vary from the historic and other types of replacement logs. Several still have old pole identification tags attached, as well. Salvaged logs have notches and trunnel holes from previous installations, and there are also Dutchman repairs, where sections of logs have been cut out and replaced. Some replacement logs blend in with the original logs, making them indiscernible from the earlier logs, while other replacement logs have been ‘hewn’ to emulate the historic logs, with a very heavy texture, as seen inside the Two-Story Log structure.

Fasteners

Nails were not typically used to construct log structures, except for nailing roofing materials, flooring, or trim. The corner notches would have provided the rigidity and their own weight would have held them in place. Treenails, trunnels, or dowels can be found in several of the structures. These are round wooden pins that are used to fasten timbers. These can be found to be installed vertically between the logs, and in some cases, they would have been used to fasten the windows or door bucks to the log walls.



Figure 4.2. Log building reconstruction underway, ca. 1976-77. This may be the Two-Story Log House in the background. (L2^20, INDU).

Weathering and Infestation

Logs weather due to sun exposure, precipitation, climate (freeze/thaw/humidity), mechanical changes (structure movement), trapped moisture, and chemical (acid rain, adjacent materials) interactions. Logs naturally weather, and with cycles of wet/dry and fluctuations in temperatures, coupled with UV radiation from the sun, different sides of a building or even logs on the same elevation can experience differing exposure and performance. The end grains of logs, as well as cuts into the top surface of logs and upward-facing checks are particularly vulnerable to water and insect infiltration and are therefore more likely to show signs of deterioration. While some species of wood are more rot resistant, all wood will eventually deteriorate.

Non-active insect infestation is visible in each of the structures. An active carpenter ant infestation was visible in the Two-Story Log structure and the Chapel. There is very little fungi on the logs, likely due to previous borate treatments.

Previous Log Preservation Treatments

The “Project Record and Completion Report” for the log buildings was prepared in October of 2004. The report states, “All three buildings have been plagued for over ten years with a powder post beetle and wood boring bee infestation. In addition, the chapel has been infested with

termites. (Chemical treatment and sealing had not been authorized previously because of a concern for discoloration of the wood surfaces.) Treatment for termites on the two-story log building and storehouse was done as a precautionary measure because of the infestation of the chapel." The 2004 project included treatment of the interior and exterior of both structural and nonstructural components of the three buildings and sealing the logs to prevent breakdown of the chemical treatment." [326]

Treatment was offered in three layers:

- Total Wood Protectant 200 Series: extend service life of wood…enhance structural integrity and appearance of aged lumber…minimize grain cracking, surface erosion, water absorbency and surface attack from mildew and algae…add lubricity and re-bulk aged dried out wood fiber…restores wood's moisture content and helps wood to stay flexible…penetrates deep into the wood…blocks sunlight (UV rays) to protect natural wood color. TWP was brushed on the exterior wall surfaces of all three buildings, and on the interior wall surfaces of the two-story and storehouse to protect the floor and ceiling in the two-story and storehouse. Eleven gallons were used on the chapel, eleven gallons on the two-story, and eight gallons on the storehouse.[327]
- Tim-bor Insecticide and Fungicide: Long-term natural solution to eliminating wood destroying organisms. Target pests: drywood termites, wood decay and fungi, carpenter ants, wood boring beetles, subterranean termites….water soluble borate powder…won't break down over time. Forty-five pounds of Tim-bor used on chapel; forty-five pounds on the two-story log house; and thirty-seven pounds on the storehouse.[328]
- Sentricon Termite Colony Elimination System: Placed around foundations and monitored monthly for one year. Ten placed at chapel, eight and the two-story log building, and eight at the storehouse.

Select Chapel logs have been treated with a very pungent creosote. This appears to have been a treatment that was previously-applied to the power poles that were used as replacement logs. The smell is very strong inside the building. Also, the window sash at the storage building was treated with Penta (Pentachlorophenol) a wood preservative used in utility poles. [329]

Chinking and Daubing

Chinking and daubing were used to fill the voids between the logs. Chinking was used to stabilize, block, and infill the very center of the wall. Occasionally, a 'soft' filler material may be used, such as oakum, cloth, or moss. The outer wear layer is daubing. Chinking could be stones or hard wood, while daubing is typically a clay/sand/lime mixture, sometimes with hemp or other fibrous materials such as animal hair, sawdust, or ashes. Chinking and daubing were manufactured from locally available materials and are the most vulnerable part of the log

[326] Collins, Judith. "Bailly Homestead Chapel, Two-Story Log Building, and Storehouse Chemical Treatment for Powder Post Beetles, Wood Boring Bees, and Termites and Sealing: Project Record and Completion Report." INDU, October 2004.
[327] Total Wood Protectant Product Information Sheet, INDU Maintenance Files, dated 2004.
[328] Tim-bor Product Information Sheet, INDU Maintenance Files, dated 2004.
[329] Invoice work order, INDU Maintenance Files, dated 2004.

structure to weathering. These natural materials require frequent inspection, maintenance, and replacement. Contemporary synthetic daubing materials are typically placed over metal lath. No original chinking or daubing materials remain in the outbuildings, due to them being completely dismantled and reconstructed. The replacement chinking is not visible but appears to be a combination of hard woods. Daubing in all three outbuildings is a cementitious material installed over screening.

A significant amount of early or original chinking and daubing remains within the clad log walls of the Main House HS-18, which appears to contain a clay-based daubing mixture. This lightweight material is further discussed in the existing conditions narrative.

Portland cement-base daubing is not recommended. Portland, although popular since the early twentieth century, does not offer the same characteristics and performance as original natural daubing mixtures. Portland is very strong and creates an impenetrable and rigid barrier that will hold moisture against the logs, not allow wood to permeate moisture, and will not move with the natural log expansion and contraction. Even the tiniest of cracks in a Portland cement daubing can wick moisture into the cement and rest against the dry logs. Because Portland is not flexible or breathable, the logs take the brunt of all movement and absorb the water. The Portland will not allow the logs to dry, and sometimes the cement penetrates and discolors the logs.

Metal lath chinking is visible on several of the structures. This type of chinking, along with the Portland cement daubing were typical 1970s log building restoration materials.

Log Exposure

The exterior of the log structures at the Bailly Homestead vary. The three outbuildings have logs exposed on the exterior, while the Main House is clad in wood. The original finished condition of the Main House is unknown, although it is suspected that the house was always clad with wood clapboards. Concealed but exposed logs on the second story south wall of the Main House show that the logs are in very good condition, with almost no signs of wear or weatherization. Early photographs of the house, prior to the twentieth century renovation, show a horizontal wood cladding, which would have made the house appear impressive for the c. 1834 period in which it was originally constructed. The interior of the logs at the house are exposed in several locations, and show a potential whitewash finish, which would have been common for an early interior finish – likely prior to the installation of later wood lath and plaster wall finishes.

Foundations

The existing foundations of the log structures varies. Originally, these structures were likely set on small stone pier-type foundation with wood floors. However, the Storehouse, being more of a secondary structure, may have originally had a dirt floor (Figure 2.111). All foundations have been replaced and are discussed in more detail in each building existing condition narrative.

Existing Condition

The conditions of the structures are fair to good and are discussed in detail in each existing condition narrative. Because the foundations have recently been replaced on the outbuildings,

the log structures are level and stable. Keeping water (rain and backsplash) away from, limiting the UV exposure, and keeping insects out of the logs is of primary concern for their preservation.

Asbestos and Lead-Based Paint Survey Report

An asbestos and lead-based paint survey was conducted for the Main House (HS-18) and the Brick House (HS-19) by Terracon Consultants, Inc., from Naperville, Illinois in June 2017. The sampling and analysis report for this survey is found in Appendix G for reference. Based on the analysis of the materials surveyed, the presence of asbestos-containing materials (ACM) and lead-based paint (LBP) and lead in the soil were identified.

Interior and exterior building components and soil were surveyed for lead, and homogenous areas of suspect ACM were visually identified and documented. Inaccessible spaces were not tested, nor was any destructive removal of materials done to achieve access to concealed areas. This report presents a representative sampling of materials but was not comprehensive in nature. Areas identified as ACM, for instance, may result in the need for further testing of similar and/or adjacent materials, in order to further understand the breadth of the presence and required scope of remediation.

ACM Summary:

Main House

- Basement Ceiling – drywall joint compound
- Basement Plaster walls – base and top plaster
- Ceiling at Third Floor – Texture of plaster ceiling. The report cautions that all texture on plaster ceilings throughout the first through third floor should be considered suspect. This would require further identification and testing, as the third floor ceiling is a different material (plaster board) than other areas of the house. Therefore, consideration and further testing should be conducted on the third floor plaster board in Room 301 to identify if this is similar to the ceiling sample.
- HVAC duct tape – found at all HVAC ducts in walls and at floor vents.
- Main roof – roofing felt paper/underlayment. This is the white underlayment that is visible through the skipped sheathing from the inside of the third floor. Based on this positive test result, it can be assumed that all structures at the Homestead contain asbestos roofing underlayment material, as all of the structures appear to have the same material.

Brick House

- Kitchen 100 – tan mastic for yellow floor tile
- Living Room 101 – black mastic and wood pattern floor tile
- Addition 102 – black mastic and white floor tile
- Addition 102 – black mastic and tan floor tile
- Addition 102 – black mastic and wood pattern floor tile
- Second Floor Addition 202 – black mastic and red floor tile
- Bathroom 201 – tan mastic and multicolored floor tile

- Closet 201A – tan mastic on white linoleum sheet flooring
- Throughout the House - Plaster wall skim coat. The report identified the skim coat in the Kitchen contains asbestos. Because this is present in one space, they have identified the entire house as having asbestos in the skim coating, even though no other samples were positive. This is because they recommend that the plaster throughout the house undergo further, more comprehensive testing. Their thinking is that if there is a skim coating present in the kitchen, then other patches could have been done throughout the house, that were intermittent and not tested. Further testing of patches and multiple samples per wall may eliminate this labeling of the whole-house plaster.
- Main roof – roofing felt paper/underlayment. This is the white underlayment that is visible through the skipped sheathing from the inside of the attic.

Lead in Soil Summary:

Soil around the Main House and Brick House were tested for lead, as detected above the USEPA action level and the IDEM Office of Land Quality Recreational Soil Direct Contact Screening level:

Main House

- South side dripline - southwest
- South side dripline – southeast
- East side dripline – northeast
- North side dripline – northeast
- West side dripline – northwest

Brick House

- None detected

Lead Based Paint

Based on the XRF testing, a summary of the LBP detected includes:

Main House

- Window frames, sills, and trim (exterior) and Painted Windows (interior)
- Exterior door frames and thresholds
- East screened door (second floor)
- Siding and trim
- Painted wood wire covering
- Painted Interior Doors and Door Frames (second and third floor)
- Painted Interior trim and cabinetry (second and third floor)
- Painted ceiling (202A)
- Floor vent (Room 208A)
- Paint on brick at Dining Room fireplace surround
- Ceramic hearth tile at the Dining Room fireplace
- Wall vent (Room 104)
- Painted beaded board paneling behind the varnished beaded board (Room 104) – these were used as nailers within the wall system.

- Painted Doors, frames, and trim in basement.
- Paint on north brick wall (Room 001) – fireplace
- Painted west wall (Room 001)
- Paint on exposed beams (Room 001)
- Paint on plaster at basement stairs

Brick House

- Window frames, sills, and trim (exterior) and Painted Windows (interior)
- Painted railing (Room 200)
- Tub, toilet, and sink (Room 201)

Utilities – Existing Conditions

Existing utilities to the site include electrical, telephone, and gas services. These utilities are routed to the Main House through a below grade joint trench that was installed in approximately 1975. There is no existing active cable/data service, water service, sanitary sewer, or storm sewer to the site.

Electrical service is fed from a 25 KVA pole-mounted utility transformer that is located on the south side of the Little Calumet River, adjacent to Howe Road (Figure 4.3). An overhead service lateral (power line) runs from this transformer to another pole that is located just east of where the entry drive intersects with Howe Road. From here the service feeder routes down the pole and below grade to a 100 amp, 120/240 volt, feed-through meter pedestal (meter #1097659) and then into the joint trench that serves the main house (Figure 4.4). The electrical service provider is NIPSCO (Northern Indiana Public Service Company).





Figures 4.3 and 4.4. Electrical utility transformer and meter pedestal. (HEI 2017)

Telephone service is fed overhead from poles located along Howe Road. The service cable routes down a pole and below grade to a telephone pedestal that is located adjacent to the electrical meter pedestal (Figure 4.5). From the telephone pedestal the cables route into the joint trench that serves the main house. The telephone service provider is Verizon (formerly GTE).



Figure 4.5. Telephone pedestal. (HEI 2017)

Gas service is fed from below grade to a gas meter assembly (meter #9965889) that is located adjacent to the electrical meter pedestal (Figure 4.6). From the gas meter the gas service routes into the joint trench that serves the main house. The gas service provider is NIPSCO.



Figure 4.6. Gas meter assembly. (HEI 2017)

Two sanitary lines exit the south side of the main house, which are no longer functioning. The termination of the pipes was unable to be determined. The previous sanitary or septic system serving the house is unknown. The only documentation found is a hand-written note on a set of 1975 drawings that points to a 42-inch diameter circle, stating the “Sewage ejection pump and housing. Remove to 6-inches below grade fill with topsoil.”

There is an existing 8-inch pipe that stubs out adjacent to the Little Calumet River to the southeast of the Brick House (Figure 4.7). This pipe may have originally served as the discharge for sanitary or storm drainage for the main house, but it is believed to be no longer connected.

There are no fire hydrants serving this homestead site.



Figure 4.7. Unused sanitary or storm discharge pipe. (HEI 2017)

There is an existing well on site that previously served water to the Main House, but it is currently inactive. There are two known water well sites north of the Main House. The first known well was operated by a windmill which can be seen in Figures 2.11 and 2.25 and had a larger storage tank. This windmill in place until the middle of the twentieth century. A more contemporary well was installed between the Chapel and the Two-Story Log House; this well may have been installed in the 1970s and has not been in use since. The specifics of the well and its functionality is unknown. The date of its last usage is unknown. The water service enters the main house in the northeast corner of the basement.

Storm drainage from the roof of the main house is collected in gutters and routed to below grade through downspouts with corrugated downspout boots. The below grade storm pipes have been scoped and they appear to route straight to the east to daylight towards the ravine.

Area site lighting is provided by three pole mounted metal halide fixtures mounted to wooden poles (Figures 4.8 and 4.9). Each light pole has a GFCI duplex receptacle with a weatherproof cover mounted near the base of the pole, approximately 12-inches above grade (Figure 4.10). The existing receptacles are not weatherproof rated devices and are not currently functioning.



Figure 4.8 through 4.10. Site lighting poles/fixtures. (HEI 2017)

Refer to site plan utilities sketch for additional information (Figure 4.11).

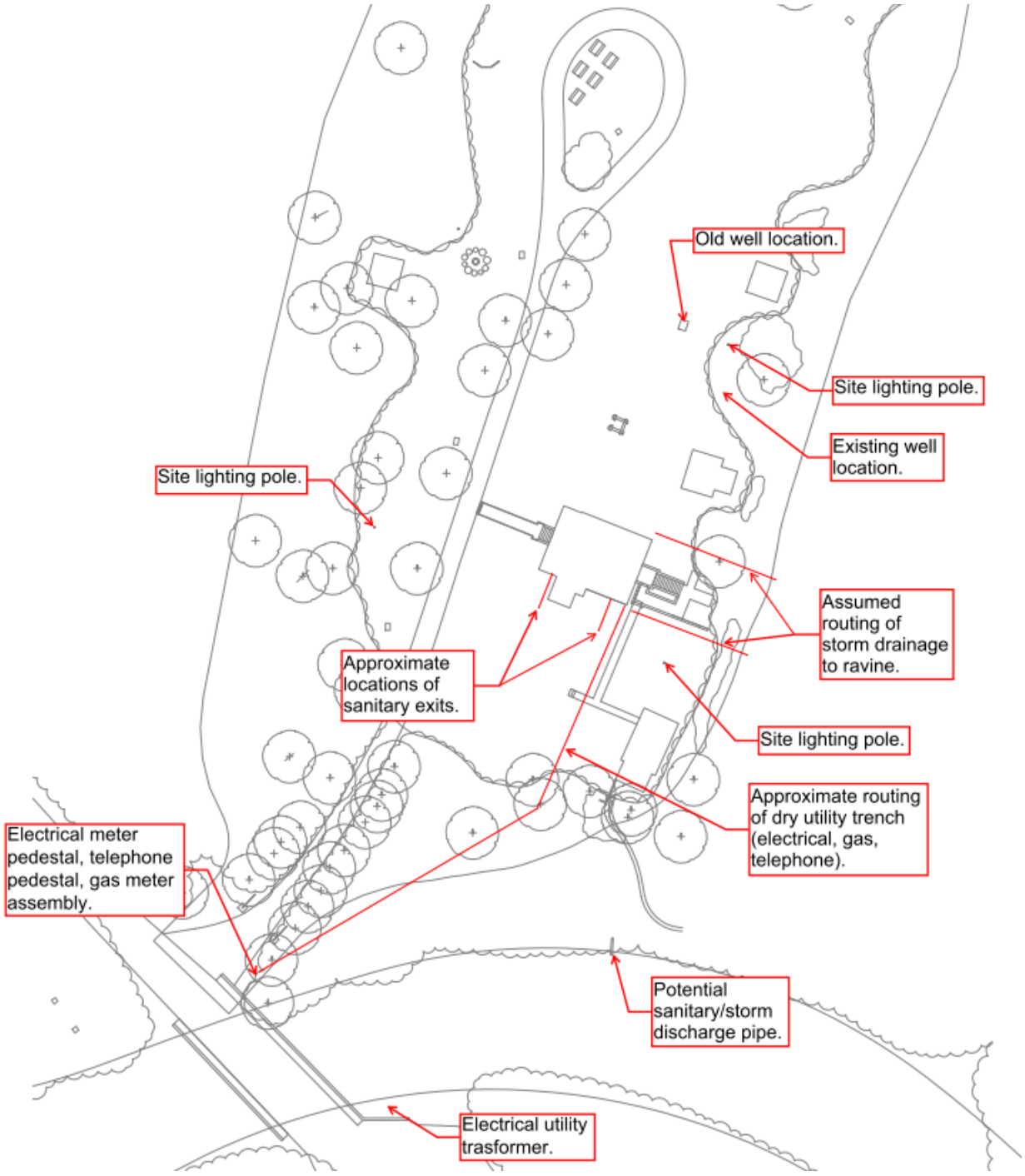


Figure 4.11. Existing Known Utility Locations Plan. (HEI 2017)

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Main House South Elevation. (Sheals 2017)

4 EXISTING CONDITIONS
MAIN HOUSE

Main House (HS-18) Existing Conditions – Architectural

Refer to Chapter 2 – Building Chronologies, for the history and development of the Main House. Existing plans and elevations of the Main House can be found following this narrative. Required repairs and proposed treatments (narrative and drawings) can be found in the Chapter 6 Treatment Recommendations section of this report.



Figure 4.12. View of HS-18 Main House, West and south elevations. (STRATA 2017)

The Main House (HS-18) is centered in the Bailly Homestead and backs up to the ravine. The main entry faces west. The hewn log house with weatherboards was originally constructed ca. 1834-1835 by Joseph Bailly and forms the core of the existing house. While the exterior of the house was finished with weatherboard siding, the interior walls were whitewashed and left un-plastered for decades. For the next eighty years after Joseph's death, his family members and descendants continued to modify the original building, with major renovations in 1869 (interior), 1875 (brick house addition), 1889 (dormers), and 1896-1904 (major property transformation). Modifications by subsequent property owners included the installation of a bathroom on the third floor (1920s), the concrete block kitchen addition (demolished in 1976), installation of restrooms in the basement of the house for the restaurant, and infilling of the front and back porches.

A major rehabilitation project took place in the 1970s by the NPS. A summary of this work included:

> *Restoration of the house started with the stripping of all siding, trim work and porches. The house was then raised 3 inches on the east side, the cripple wall on 2nd floor level was replaced, and roof ridge from north to south was raised 8 inches. The basement portions were removed and a new 5 inch concrete floor over wash gavel was poured. A*

> *stabilizing 8 in steel beam was installed from east to west on steel jacks. The two leveling steel beams were left in place also and are directly under hall and stair partitions. Only the mechanical furnace room was reconstructed in the basement area. The exterior work proceeded with installation of new sills, steel X bracing, replacement of sheathing, rebuilding of northwest corner. All exterior siding, porch flooring, porch rails, exterior doors, and porch columns are of new materials.[330] The east porch was entirely reconstructed using new concrete blocks, railing and balusters. The roof was rebuilt using new 2 x 6 rafters, new sheathing and shingles. West porch stone stairs and brick walls were reconstructed. All of the duct work and register openings are new.* [331]

Despite the significant changes, the house currently appears much as it did at the time of Frances Howe's death in 1917, which is the period of significance for the continued maintenance and rehabilitation. The two-and-one-half story house rests on a raise stone foundation with a full basement and has front and rear porches. The perimeter of the house is constructed from hewn logs clad in wood siding. The third floor is tucked within a half-height gabled attic space. The first floor framing is dimensional lumber, likely installed when the house was raised and the basement constructed ca. 1899-1900. Floor framing for floors two and three are hand-hewn beams, spanning the entire depth of the house east/west. These beams are exposed in the Dining Room and Bedroom 201 and are believed to be hand-planed in these rooms only. Framing for the gables and roof system are dimensional lumber, with some historic log rafters remaining within the more contemporary framing. The roofing is wood shingles over an asbestos underlayment and skipped wood sheathing. Two chimneys are located on the roof; one is in the northwest corner, and the second is centered in the south roof.

The footprint of the building is 1,333 square feet, including the porches. The main block of the log house is 29'-11" (north/south) by 23'-4" (east/west). Gross square footage of each floor, including stairs and interior partitions is: Basement 1,333 sf; First Floor 823 sf; Second Floor 798 sf (includes the inaccessible nook spaces); and Third Floor 949 sf (includes low ceiling closet and knee wall spaces).

The NPS replaced the roofing with wood shingles in the 1970s and again in 1992.[332] It is not known if the existing wood roof dates to 1992, or there was another roof installed since that date.

The NPS Historic Preservation Training Center (HPTC) was hired to make repairs to the exterior millwork, siding, and window preservation in 2001. HPTC 2001 Scope of Work and Observations (recorded in report - all items date-stamped):[333]

[330] Judith Collins, INDU, has noted that not all of the siding and trim was replaced during the NPS renovation, because the historic finishes contractor was able to find a good record of paint colors for a historic paint analysis study of the exterior of the Main House, which was completed in 2002.
[331] Preservation Guide, Section 6: Chronology of Known Alterations. National Park Service, 1977.
[332] INDU Maintenance Records, August 7, 1992.
[333] INDU Maintenance Files, Memorandum: Preconstruction Meeting Minutes, Superintendent, INDU, August 1, 2001.

- Active carpenter ant infestation
- Removed seventeen sashes for preservation
- Replaced twenty-five linear feet of drip cap and twenty-six linear feet of siding
- Epoxy repairs at north elevation attic window and re-glazing of window lights
- Window caps on window units of the second floor replaced with lead-coated copper over wood
- Five window casings replaced on the first floor, north elevation windows and epoxy repairs
- Deteriorated metal caps on the first floor replaced with new lead coated copper caps
- Double windows on north elevation basement new sill, new parting bead and two Dutchman repairs and re-glazing

Historic paint analysis was conducted for the NPS in 2002, and the house was painted with historically accurate colors, dating to 1910. The study was conducted by Brent Humecki of Crete, Illinois. He uncovered thirteen layers of paint.[334]

Two fires are believed to have occurred at the house, though neither is well documented. One fire is mentioned in correspondence in 1938 and the other is thought to have occurred in the 1960s.[335,336]



Figure 4.13. Fire damage behind the west wall in bathroom 301. This is located in the southwest corner of the house. This may date to either the 1930s or 1960s fire. (STRATA 2017)

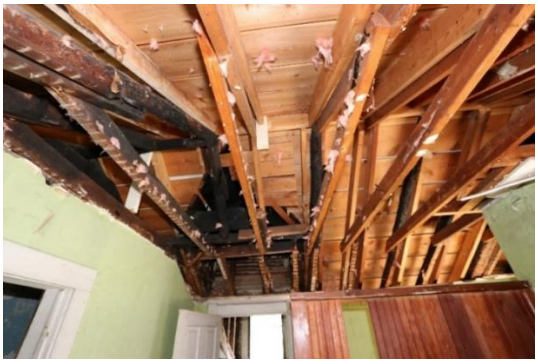


Figure 4.14. Fire destroyed the roof framing in the south portion of the house in the 1960s. The roof framing seen in the Room 301 dates from at least three and maybe four campaigns of construction and repairs: original log rafters and collars; ca. 1930s framing repairs (unconfirmed); ca. 1960s framing repairs; and 1976 roof re-framing. (STRATA 2017)

[334] INDU Maintenance Records, November 14, 1990.
[335] Letter to SSND from Mox G. Ruge, Attorney at Law, September 12, 1938, SSND Bailly Homestead papers.
[336] Walter, *Historic Structures Preservation Guide Bailly Homestead,* 1977, 6.4, Sheet No. 3.

Exterior Conditions

The exterior of the Main House is in fair condition with select materials and finishes in poor condition (Figures 4.15 – 4.18). The existing condition of the major components of construction are discussed in detail below.



Figure 4.15. View of HS-18 Main House, West elevation. (STRATA 2017)



Figure 4.16. View of HS-18 Main House, South elevation. (STRATA 2017)



Figure 4.17. View of HS-18 Main House, East elevation. (STRATA 2017)



Figure 4.18. View of HS-18 Main House, North elevation. (Sheals 2017)

Masonry Foundations

The original house was likely constructed on piers, very close to the ground, as seen in Figure 2.14. The house was lifted, the new basement excavated, and the masonry foundation installed ca. 1896 - 1900. The perimeter walls are rusticated native stone in a random ashlar pattern, and interior diving walls are constructed of multi-wythe brick. Later modifications in the 1976 renovation, include concrete masonry units where walls were reconstructed.

The masonry foundation is in good condition, requiring typical maintenance for a foundation of this age. Spot repointing is required on the stone exterior and also throughout the basement interior on both the stone and brick walls. Rising damp is apparent on the interior of the masonry walls. The masonry walls are not waterproofed on the exterior, therefore allowing moisture infiltration in certain locations in the basement. Mortar joints are full-width beaded mortar. Mortar joints between the stone and window and door openings are cracked. The exterior masonry is also covered with years of biological growth and soil. The north foundation wall exhibits the most rust-colored biological growth.

Masonry patching in the east wall of the porch foundation identifies changes likely made to this porch wall during Frances Howe's renovations, or later. Note that there is a vertical line in the stones and the back (interior) side is brick. This existing masonry configuration can be seen in the 1924 photographs of this area (Figures 4.20 – 4.21). This was likely an infill of a previous window opening, similar to the south side of the stairs.

Stone was relayed in 1976 at the southeast corner and east walls of the basement, at the porch foundation.[337]

The stone front step treads are cracked throughout and are deteriorating. They show evidence of previous patching.



Figure 4.19. Typical raised beaded mortar at north foundation wall. (STRATA 2017)

[337] 1975 record drawings, INDU.





Figure 4.20. East wall of east porch. Note the vertical line in the stone and the stone coursing changes left and right of the line. This condition appears in a 1924 photograph, indicating changes were made prior, and the wall is infilled on the basement interior with red brick. (STRATA 2017)

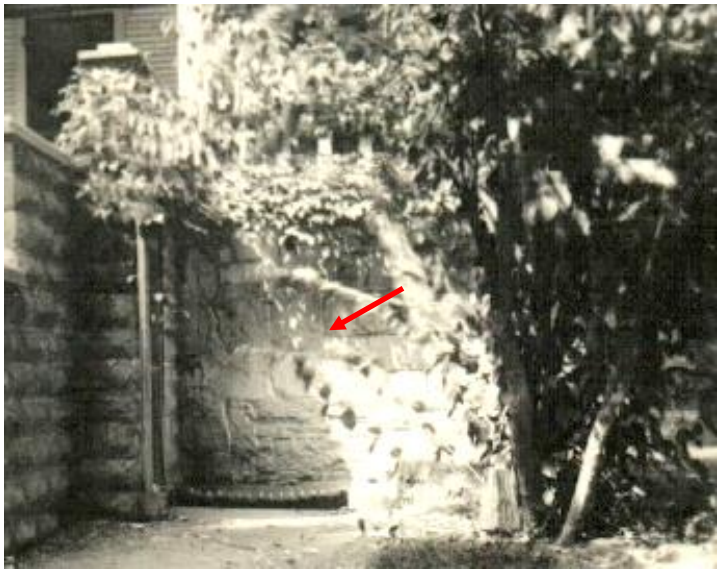


Figure 4.21. 1924 photograph of the east porch foundation wall showing the vertical line in the masonry. (INDU Museum Collection, 1924.)



Figure 4.22. Stone front steps and walls were relayed during the 1976 rehabilitation project. The treads are cracked and patched throughout. (STRATA 2017).

Masonry Chimneys

The house has two brick chimneys. The south chimney is a hybrid chimney, containing a flue from the original ca. 1834 house and additional flues from the ca.1900 renovation project. The original brick chimney can be seen on the third floor in Room 301 and its foundation in the basement (Figure 4.171 and 4.77). The ca. 1900 chimney was constructed south and adjacent to the existing ca. 1834 chimney. The newer chimney is exposed on the south elevation and projects through the roofline (Figure 4.16). The earlier chimney flue snakes into the southern 1900s chimney at the third floor level, creating a single chimney above the roofline. Where the chimneys connect at the third floor, the ca. 1834 chimney is truncated, very likely when the ca. 1900 chimney was built. One of the chimneys see at the third floor may have been the cause of the either or both of the 1938 or 1960s fires, as the chimneys are very black and are in the general location of the most significant part of the fires. The number of flues within the ca. 1900 chimney above the roofline is unknown, but it is likely there are two or three flues. One of the flues is currently used to vent the gas furnace in the basement and has a twenty-six gauge stainless steel liner inserted into the flue, as noted on the 1976 shop drawings. The chimney is currently covered with a rain cap, also installed in 1976. The exposed portions of the chimney require repointing and repair of the south flashing, which is loose.

The northwest chimney was likely constructed ca. 1900 as part of the major house renovation project, which included the construction of the corner fireplace in the basement and Dining Room 104 (Figure 4.114). The top ten courses of the chimney were reconstructed during the 1976 rehabilitation project and is currently not capped. It does not appear that any type of mechanical equipment utilizes this chimney for venting, and the open flue is allowing water infiltration into the chimney, which is causing damage to the fireplace in the basement. The chimney requires spot repointing and a cap.



Figure 4.23. South chimney with rain cap. Note the south flashing is loose and the chimney requires repointing. (STRATA 2017).



Figure 4.24. Northwest chimney with no cap. (STRATA 2017).



Figure 4.25. Northwest chimney unlined with no cap. (STRATA 2017).

Exterior Log Walls

The core of the ca. 1834 house is constructed of hewn logs, two-and-one-half stories in height. The logs are chinked with what appears to be a clay and lime daubing. While the log structure is not visible, it is the major load-bearing structural component of the building. The logs have always had weatherboard on the exterior, protecting them from exposure. Evidence of this can be seen in the 1976 rehabilitation photographs, as well as a hole in the wall in Bedroom 201 (Figure 4.27). The logs exposed in this hole would have been the outside logs before the ca. 1900 house renovation. The good condition of the log surfaces currently visible indicates that the log structure has never been exposed to the elements.

The logs rest on the ca. 1900 masonry foundation. Logs can be seen in wall openings on the interior in several locations on the first, second, and third floor. The logs, where visible, appear to be in fair to good condition, with the exception of the northeast and northwest corners of the building. These locations have historically had water infiltration issues and required significant structural work during the NPS 1976 rehabilitation. The 1975 repair drawings indicate how the NPS planned to stabilize and repair the log walls. Unfortunately, documentation of the actual work is very sparse with only a handful of photographs found to date, and some general notations on record drawings.

Due to the concealment of the logs, assessing their condition is very difficult. Log deterioration is noted in the Structural section of this report, where visible.

While the exterior of the logs has always been clad in weatherboards, logs were originally exposed on the interior of the house and were whitewashed, as documented in several histories. Whitewash finish can be seen in several locations on the interior of the walls. The

walls were not plastered until much later. Lath nails are all wire cut, dating lath installation to the twentieth century.



Figure 4.26. Interior photograph of the logs and daubing material, as seen in the Parlor. (STRATA 2017)



Figure 4.27. Photograph of an original exterior wall log, as seen in the second floor nook off of Bedroom 201. Note the vertical wood furring, which was set to receive horizontal siding. The logs seen here have never been exposed to the elements. (STRATA 2017)



Figure 4.28. Third floor closet west of Room 304. The original west top log is visible in this space and is deteriorated. This log was likely deteriorated prior to the 1976 rehabilitation, but was not replaced, as it has been well protected in this closet wall. (STRATA 2017)



Figure 4.29. The top of the east log wall is visible in the closet east of Room 304, at the gap between the floor and the ca. 1976 wood frame 2x6 knee wall. (STRATA 2017)



Figure 4.30. Photograph of the exterior rehabilitation conducted by the NPS ca. 1976. (L2^29, INDU Museum Collection, ca. 1976)



Figure 4.31. Photograph of the northwest corner of the house during the exterior rehabilitation conducted by the NPS ca. 1976. Note the significant log deterioration at this corner. (L2^50, INDU Museum Collection, ca. 1976)

North Basement Areaway

The north basement areaway is constructed of a combination of natural stone and poured concrete (Figures 4.32 – 4.35). It appears the original stone walls were reinforced by the addition of a poured concrete north wall, as there is still stone located along the north side of the concrete wall. The landing at the bottom is concrete, and the steps are poured concrete, with natural stone top tread.

The floor drain in the northwest corner of the bottom landing is likely non-functioning, as it is permanently covered with a deteriorated piece of tin affixed to the concrete floor (Figure 4.34). With no functioning drain, this areaway likely fills with water during rain events. The basement door wood threshold is deteriorated, from the lack of drainage (Figure 4.35). The threshold is clad with a rubber membrane to ward off moisture, but the membrane is deteriorated and holding water in the wood. No work is noted to the areaway on the 1975 drawings, so it is likely that the drain was not active.

The risers and upper stone treads at the steps are uneven due to the differing materials. The stone tread at the top of the stairs is at least three separate units, which are not set flush with one another and are spalling. The mortar joint between the steps and the building is deteriorated and plants are growing in this space. There is no handrail at the steps. The window adjacent to the steps does not appear to be tempered, as required by building code.



Figure 4.32. North basement areaway. (STRATA 2017)



Figure 4.33. North basement areaway. (STRATA 2017)



Figure 4.34. North basement areaway drain (currently concealed with deteriorated tin plate). (STRATA 2017)



Figure 4.35. North basement areaway deteriorated wood threshold at basement door. (STRATA 2017)

Rusticated Cast Concrete Blocks – East Porch and Conservatory

The east porch and related east stairs date to the 1976 porch reconstruction. All components of the original porch were deteriorated and were carefully replicated. The east porch is configured today, as it was after the ca. 1900 major renovation of the house. The porch is constructed with a reinforced concrete porch deck over steel decking at the first floor level and supported by a new steel beam and posts on new footings, which are exposed in the basement below. The porch floor is a single concrete pour with no expansion joints. There is minor cracking visible. The porch has a cast concrete balustrade with a cast-in-place concrete topper. The balustrade is secured with anchor bolts set into the concrete, through the balusters and anchored to the posts with steel anchor straps.[338] The balustrade is in good overall condition, requiring spot repointing and cleaning.

The east stair walls are constructed with rusticated cast concrete block walls, cast concrete caps, and concrete steps. The cast concrete blocks are deteriorated, with specific units showing higher concentrations of deterioration. Mortar joints are deteriorated and open. The cast concrete units are soiled and show the same rust-colored biological growth as the stone foundation along the north-facing elevation of the balustrade and walls. Adjacent site walls and planters are constructed of the same cast concrete blocks and caps. These walls have settled and shifted, and the skyward-facing joints in the caps are deteriorated, causing deterioration of the walls. It is unclear if the planter at the south side of the steps contains drainage. The east steps to the first floor porch have deteriorated and spalling concrete treads (Figure 4.36).

There are no handrails at the east steps. The balustrade is on average only 28-inches high, which does not meet current building code guard railing height.

[338] 1975 NPS record drawings, INDU.



Figure 4.36. East porch with native stone foundation, concrete porch deck, rusticated cast concrete block stair walls and balustrade, and concrete steps. (STRATA 2017)



Figure 4.37. East porch and stairs ca. 1924. (INDU Museum Collection, 1924)

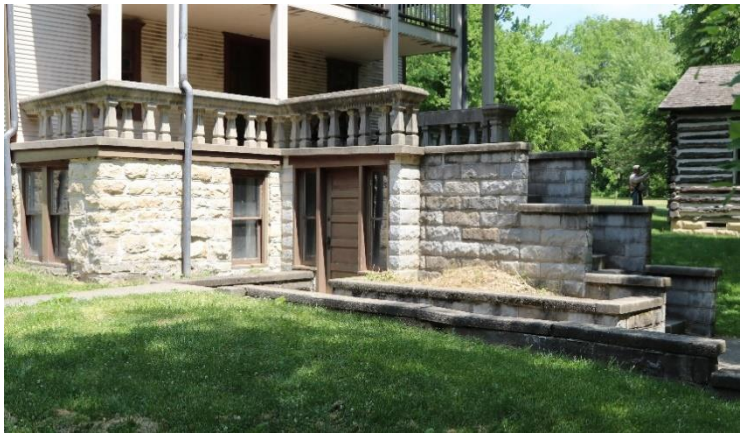


Figure 4.38. East porch with native stone foundation, concrete porch deck, rusticated cast concrete block stair walls and balustrade, and concrete steps. (STRATA 2017)



Figure 4.39. East porch stairs deteriorated rusticated cast concrete block wall. (STRATA 2017)



Figure 4.40. East porch cast concrete balustrade with rust-colored biological growth. (STRATA 2017)

The conservatory, constructed on the south side of the house ca. 1904 is clad with a four-inch rusticated cast concrete block veneer and with cast concrete lintels and sills (Figure 4.41). The cast concrete block veneer was relayed on a new concrete footing in 1976. Except for one unit, the cast concrete veneer is in good condition, requiring repointing and cleaning. The southwest corner cast concrete unit set in grade is showing signs of deterioration (Figure 4.41). Joints at the window frames and joints between the cast concrete wall and the wood walls require new sealant installations.





Figure 4.41. Conservatory with four-inch cast concrete block veneer and cast concrete lintels and sills. Detail of deteriorated stone at southwest corner. (STRATA 2017)

Wood Siding, Trim, Wall Shingles, and Porches

The house is clad with narrow wood siding with a two and one-half-inch exposure. The extent of siding replacement from the 1976 NPS project is not documented. There appears to be a mixture of historic and newer siding. Originally, the hewn log structure was reportedly clad with seven-inch weatherboards with a six-inch exposure.[339] All of the porch components (framing, wood tongue and groove flooring, beaded board ceiling, railings, posts, and trim) are reproduction materials dating to the 1976 project. Several of the historic buildings components were salvaged and are stored in the basement, including column covers, porch railing, flooring, and exterior trim materials. The HPTC conducted the exterior restoration work in 2001, as noted in the introduction section above. The house was painted with neutral colors until the historic paint analysis was completed and the house was repainted in the current color scheme in 2002.

The siding is currently very dirty. Paint at siding, trim and wall shingles is deteriorated, with peeling paint on all elevations. The paint is also covered in mildew on the north elevation. There is wood rot in the siding in spot locations throughout each elevation, as well as in the trim and siding shingles. Woodpecker and insect damage has occurred on the porch columns, which has been covered with Tyvek material. Woodpeckers have also damaged the wall shingles on the south elevation (Figure 4.43). The peeling and deteriorated paint on the wood porch flooring at all three porches has exposed the raw wood, causing further deterioration. The porch railings are deteriorated in some locations, including the east second floor porch. This porch should be closed to visitor and non-maintenance staff access, as the railing is deteriorated beyond repair and presents a safety hazard.

Steel angles were installed beneath the north log wall as part of the 1976 rehabilitation project to assist with lifting and leveling the house. These angles were left in place. This angle can be seen along the gap between the stone foundation and the siding (Figure 4.47). The steel is beginning to rust. These angles were left in place and now assist in load distribution over the basement openings. The condition of the sill log in this location is unknown. There is no good documentation of this decision-making process for leveling and bracing the building.



Figure 4.42. East porch looking at mildew and dirt accumulated on the exterior millwork (siding and ceilings). Note the porch floor has peeling paint and the railing is deteriorated and unsafe. (STRATA 2017)

[339] Historic Structures Report, 1972, 36.



Figure 4.43. East porch detail of peeling porch floor paint and 'Tyvek' wrap at column to cover woodpecker damage. (STRATA 2017)



Figure 4.44. Typical paint and siding deterioration and rot along north wall. (STRATA 2017)



Figure 4.45. Woodpecker damage and peeling paint at the south wall. (STRATA 2017)



Figure 4.46. Detail of deteriorated west porch floor. (STRATA 2017)



Figure 4.47. Detail of rusting steel angle behind the siding at the north wall. (STRATA 2017)

Wood Windows and Exterior Doors

Wood windows throughout the house date from the multiple campaigns of construction and style. The first and second floor windows, except for the conservatory and Window 102 at the Dining Room stair, are double-hung 9/9 sash. There was once a stained glass window installed in the existing Window 103 opening (likely dating to the ca. 1900 renovation by Frances Howe) which was removed prior to the NPS ownership. The conservatory Windows 107 and 108 are decorative leaded glass upper sash with a single fixed lite sash below. The east dormer windows on the third level are double-hung 6/6 sash, while the dormers on the west side are 4-light sashes. Windows on the south elevation and west elevations of the third floor are 4/4 double-hung. The decorative windows at the north elevations are 6/6 windows flanked with arched 1/1 windows. Window types in the basement vary from 6/6 to single light windows.

Windows were restored and missing or deteriorated windows were reconstructed during the 1976 rehabilitation. These are documented on the record drawings.

Only the new windows in new openings that were installed as part of the c. 1900 renovation have sash ropes. A majority of the windows that are in original (c. 1834) window openings have oval wood patches in the jambs, where a sash pulley would be installed in a window with operating sashes. This is of note, because none of the original c. 1834 windows have pockets for sash weights, and therefore do not have pulleys. These windows are all installed in the log walls before this was popular, so there is no extra width to accommodate sash weights. Because almost all window jambs in the first and second floor have jambs with oval patches, it may be worth noting that these may have been standard order sashes retrofitted on site to fit the original window openings. This would suggest that the jambs likely date to the c. 1900 renovation, and therefore, the sashes in these openings may also date to that same time.

Window 204 on the east exterior wall of the second floor does not have the patches in the jamb. This is part of the room that is an anomaly in the house, with none of the finishes or sash hardware matching other spaces (Figure 1.140). The sash lock here is unique to the house, resembling a ‘claw’ which holds the sash open or closed by forcing a textured ‘wheel’ into the wood jamb. No research has turned up information with regards to this type of sash holder. Perhaps this is an original c. 1834 set of window jamb and sashes. There are at least two other types of sash locks installed on the double-hung windows. One that is arched and slides over the top to catch (as seen on Window 208 and in the Conservatory), and another type that is typical rotating catch (Window 105). Several windows have no sash locks. There are not sash lifts installed on the windows.

There are currently no shutters installed on the house, although there is evidence of previous shutter hinges installed on the exterior window jambs. Photographs of the house in the 1890s show shutters, but this was before the major renovation project; as photographs from the 1920s show no shutters.

The dormers were installed in 1889, with two on the east roof (remaining) and two on the west roof (removed when the cross gable was added ca. 1900). Windows dating to the ca. 1900 renovation include: third floor west gable; windows in the third floor north and south exterior walls; windows in the second floor nooks; and all of the basement windows.

Metal interior storm windows were installed by the NPS at an unknown date. The condition of the interior windows varies; some are in good condition, while others are missing glass or are completely missing.

The windows were last restored as part of the HPTC restoration work in 2001 and painted in 2002. The exterior of the windows (sashes and surrounds) are showing signs of advanced deterioration, including peeling paint, wood rot, and deteriorated glazing putty. The windows along the south and north walls are not protected and are in the worst condition, while those covered by the west and east porches are in fair condition. The leaded glass windows in the

conservatory have broken panes of glass and require repair. Basement windows under the west porch are contemporary wood frames infilled with plexiglass; one window has a hole cut through it, which is open and can allow pests to enter the basement.

The origin of the front and back porch doors (1/100 and 1/102) is unknown, but pre-date the NPS purchase of the property. The 1976 NPS record drawings indicate to relocate existing doors to these locations. These may have been removed and later reinstalled in their original locations, or they are simply salvaged doors from elsewhere that were utilized here. The screened Door 1/100 on the west porch is a reconstruction, perhaps based on the historic photographs. The screened Door 1/200 on the east porch may be early.

The basement Door 1/001 pre-dates the NPS rehabilitation, and was noted as non-original, but was to remain. The doors under the east porch stairs, Doors 2/006 and 3/006 and the sidelights are reconstructions from 1976. The origin of the second floor east porch Door 1/200 is unknown. The 1976 drawings indicate it was to be a 'new door,' which could also have meant to use a salvaged door from another location in the house. This door and hardware matches other doors in the house and appears to date from the period of significance. The French Doors 2/203 were existing in 1975, and were indicated to be varnished, have glass replaced and install dead bolts to match the existing (Figure 4.56). These may date to the ca. 1900 renovation, although they appear to have been fabricated from a single door that was paneled and salvaged from elsewhere.



Figure 4.48. Typical exterior 9/9 window. (STRATA 2017)



Figure 4.49. Typical 6/6 double-hung windows at third floor east-facing dormers. (STRATA 2017)



Figure 4.50. Typical dormer deterioration. Note the rust above the Window 311 is the exposed flashing, which is rusting due to peeling paint. (STRATA 2017)



Figure 4.51. South windows at the second and third floors are deteriorated due to their extreme exposure. The windows do not close properly. They have peeling paint, wood rot, and deteriorated glazing putty. Woodpecker damage is visible in the adjacent siding. (STRATA 2017)



Figure 4.52. Wood rot in Windows 205/206. (STRATA 2017)



Figure 4.53. Window frames and sashes are deteriorated in the conservatory, exposing the wood. (STRATA 2017)



Figure 4.54. Leaded glass window in the conservatory with broken pane of glass. (STRATA 2017)



Figure 4.55. Exterior of east porch entry Door 1/102. This door also matches the west porch entry door. The vanish on the door is deteriorated. (STRATA 2017)



Figure 4.56. French Doors 2/203 at the second floor west porch. (STRATA 2017)

Wood Shingle Roof, Gutters, and Downspouts

The original roof was wood shingle. Sometime during the mid-twentieth century, the roof was clad with red-colored asphalt shingles. The NPS installed a wood shingle roof in 1975 with eighteen-inch long shingles and a 'Boston Ridge', which was replaced again in 1992. At that time, the park management discovered that the roof was covered with a layer of roofing felt and asbestos underlayment that had been installed in 1975 for protection against fire. It was decided that since the asbestos felt was covered with asphalt felt that there was no risk and they (the NPS) continued to shingle the roof.[340] The asbestos underlayment remains installed on the roof. This white-colored material is visible between the wood skipped sheathing from the third floor. The date of the existing wood roofing installation is unknown. It is in good to fair condition, with several shingles missing or broken. The north-facing sections and the edges of the roof shingles at overhangs are covered in moss and are starting to deteriorate. Flashings appear to be lead coated copper and in good condition. The roof was observed from a lift on both the south and the north sides of the house during the June 2017 site survey.

Half-round gutters and round downspouts date to the 1976 rehabilitation and appear to be lead coated copper, as well. The gutters are attached with exposed hangers which are installed through the tops of the shingles. This is not a desired installation, as the attachments can introduce water into the shingles (Figure 4.63). Several downspouts are damaged near the base, likely from mowers. The downspouts are directed to in-grade boots, which are tied together into two below-grade lines (one to the north of the house and the other to the south of the house), both of which drain to daylight east of the house towards the ravine. The date these were installed is unknown. The report team had the below-grade lines scoped in August 2017, and the drain lines were functioning.

Lighting protection is installed throughout the roof, but the system condition is unknown.



Figure 4.57. Roof, as seen from the lift, looking north. (STRATA 2017)

[340] INDU Maintenance Files, August 7-10, 1992.



Figure 4.58. Roof, as seen from the lift, looking north. (STRATA 2017)



Figure 4.59. Conservatory roof, as seen from the lift. (STRATA 2017)



Figure 4.60. North-facing roof, as seen from the lift. Note the prevalent moss growth between the shingles and the broken shingle under the dormer. (STRATA 2017)



Figure 4.61. Southwest corner of the conservatory roof, as seen from the lift. Note the moss growth on the end grains of the shingles and the gutter straps installed on top of the shingles. This section of gutter is also broken at the seam. (STRATA 2017)



Figure 4.62. Southwest corner of the conservatory roof, as seen from the lift. The seam in the gutter is broken. (STRATA 2017)



Figure 4.63. Northeast corner off the roof, as seen from the lift. Example of gutter strap installed on top of shingles. (STRATA 2017)



Figure 4.64. Typical downspout. Note that it is crushed near the base, likely from mowers. (STRATA 2017)

The conservatory roof was re-framed at some point after the 1920s. The conservatory addition, constructed ca. 1904, originally was built with a glazed skylight, as seen in Figure 4.65 below.



Figure 4.65. Conservatory with glazed skylight ca. 1924. (INDU Museum Collection, 103, ca. 1924).

Existing Conditions Interior – Basement

The basement floor has approximately 1,333 gross square feet and contains six rooms. The house was raised, the basement excavated, and the stone and brick foundations constructed ca. 1900. The basement contained the kitchen, a dumb waiter, an office, a coal storage room, and other storage areas. The exact layout and usage of the spaces is not well documented. There are a handful of 1970s photographs of the basement, which are presented in the Chapter 2 Building Chronologies section of this report along with representative chronological floor plans (Figures 2.75 – 2.77). These photographs show the finishes for the basement rooms, which had lath and plaster walls and stained decorative trim, similar to upper floors. The kitchen areas had painted trim and vertical beaded board wainscoting.

This basement floor level is accessible from a small interior winding staircase in the northeast corner that leads to the first floor Dining Room. A door is centered on the north wall, which is accessible from and exterior areaway, and two doors are accessible from the room under the east stairs. The basement has witnessed significant changes since its original construction over 117 years ago. When the house was renovated into a restaurant, a commercial kitchen was constructed to the east of the building and connected to the house through the north Door 2/006. Restrooms were added in the basement area, although their exact layout is not well documented. The NPS installed a new mechanical room in the center of the basement Room 001 as part of the ca. 1976 rehabilitation.

All utilities and mechanical systems for the house enter into the basement. These include the water service from the well, electrical panels, gas service, telephone, and the security panels for all buildings at the homestead. Two sanitary lines are visible along the south wall, which appear to exit toward the south yard, as well.

Rooms 001 and Mechanical 004

This largest space in the basement is Room 001, which is approximately 537 square feet, measuring approximately 21’-10” (east/west) by 26’-10” (north/south). The ceiling height in the basement is 7’-7 ½”.

This large space was originally sub-divided into several smaller rooms, and the dividing walls have been mostly removed. A new Room 004 was constructed in the center of the space to house the mechanical equipment ca. 1976.

The floor is a poured concrete slab over washed gravel, dating to 1976.[341] One oral history mentions that the basement originally had a brick floor. NPS drawings also show that there was an old brick cistern near the center of the basement that has been covered. Walls are a combination of exposed stone, brick, gypsum board, and remnants of older lath and plaster and

[341] Walter, Douglas S. *Historic Structures Preservation Guide Bailly Homestead*, “Chronology of Known Alterations,” U.S. Department of the Interior, National Park Service, Indiana Dunes National Lakeshore. Sheet 5, 1977.

wood wainscoting. The ceiling is covered with gypsum board, for which the drywall compound tested positive for asbestos during the 2017 assessment. This ceiling was installed ca. 1976. The ca. 1900 winding wooden stair to the first floor is located in the northeast corner of the room. This stair is discussed in the First Floor section of this report. There is a board and batten door at the entry to the steps that appears to be early. A small closet space under the stairs is in deteriorated condition. The concrete floor was poured around the wall, indicating that the wall pre-dates the concrete floor slab installation. The door to this closet is missing.

There are two windows, one in the north wall and one in the south wall. They are both small and are set high near the ceiling. These windows appear to be original to the construction of the basement. Remnants of historic trim are found throughout the space, but most is in poor condition.

Three modern steel beams span the basement to support ceiling members. The stabilizing 8-inch beam was installed during the 1976 rehabilitation project, but the date of installation for the other two beams is unknown. These are further discussed in the Structural section of this report. Two lally columns, in line with the two above in the Parlor, flank the masonry chimney foundation at the south wall.

The furnace is installed within the Mechanical Room 004. All ductwork from this space exits the room and routes across the ceiling to serve the upper floors and to exhaust through the south chimney. Gas piping runs across the ceiling. Plumbing and disconnected sanitary piping is visible in the southeast corner and also at the south wall, west of the chimney mass.

While the remnants of historic finishes (plaster, beaded board wainscoting, and trim) visible along the east and south walls remain, they are in very poor condition.

Along the west brick wall, the stone foundation or footing is visible near the base of the wall. This stone footing creates a step up into the two adjacent rooms under the west porch.

Remnants of the old dumb waiter were found stored in the northwest room under the west porch (Figures 4.79 – 4.80). There is no documentation indicating where the dumb waiter was originally installed. The basement ceiling is covered with modern gypsum board, so evidence where it would have gone through the floor is missing. It is believed that the dumb waiter was located within the kitchen and rose to serve into the Dining Room, which is above the north section of the basement. Some silhouettes and varied varnish wear along the south Dining Room walls suggests that the dumb waiter may have been installed along the south wall, towards the east end, close to the door into the East Foyer. Unfortunately, no documentation of the dumb waiter and installation has been found to date. And, there are absolutely no areas in the finish of the existing wood first floor that would suggest there was a patch made to infill an area of a dumb waiter. The only way to make the architectural evidence and the oral history compatible would be to note that the finish floor in the Dining Room must have been altered or is a replacement flooring since the ca. 1900 renovation. Unfortunately, without any documentation of this, there is no way to prove this theory. A small hole in the ceiling in the

basement shows there is plywood floor and framing infill in the approximate location where the dumb waiter may have been installed. This bit of evidence would require further investigation. This may prove the first finish floor is a later addition, once the dumb waiter was removed. This work could have been done during the period of significance. Perhaps they felt it wasn't useful and had it removed before the decorative wood flooring was installed.

The components found from the old dumb waiter include two of the side panels, the counterweight pocket, and two panels from the cab with one pulley. The painted finishes of the exterior of the panels suggests this was built into cabinetry in the kitchen space. The interior of the paneling is unfinished and there are two cab 'guides' installed to keep the cab in place. There are many ways to construct such a dumb waiter, including several systems of pulleys and levels of sophistication available during this time. This dumb waiter appears to be a very simple, almost primitive homemade apparatus. Because so much of the original dumb waiter is missing, one can only imagine its appearance on the first floor, as well as its mechanical assembly. An example of dumb waiter mechanics is shown in Figure 4.81.

The diagonal fireplace constructed in the northwest corner of the space likely dates to the ca. 1900 renovation project. The steel firebox lintel and several bricks are deteriorated. The chimney is not capped allowing water to enter the flue.

The exterior Door 1/001 in the north wall exits to the areaway. The door is deteriorated and is not weatherstripped. The threshold is deteriorated. Wood steps are constructed in front of the door, which are also deteriorated. The age of the door is unknown.



Figure 4.66. Basement 001, East side, looking south. (STRATA 2017)



Figure 4.67. Basement 001, East side, looking southwest. (STRATA 2017)



Figure 4.68. Basement 001, East side, looking northwest. (STRATA 2017)



Figure 4.69. Basement 001, East side, looking west. (SEA 2017)



Figure 4.70. Basement 001, West side, looking south. (STRATA 2017)



Figure 4.71. Basement 001, West side, looking south into Mechanical Room 004. (STRATA 2017)



Figure 4.72. Basement 001, Looking towards south stone wall and west brick wall. (STRATA 2017)



Figure 4.73. Basement 001, Detail of fireplace. (SEA 2017)



Figure 4.74. Basement 001, Detail of stair Door 2/001. (STRATA 2017)



Figure 4.75. Basement 001, Detail of north Door 1/001 to exterior areaway. (STRATA 2017)



Figure 4.76. Basement 001, Detail of closet and Door 5/001. (STRATA 2017)



Figure 4.77. Basement 001, Detail of steel posts at chimney mass. (STRATA 2017)



Figure 4.78. Basement 001, Detail of plywood infill at ceiling/first floor where dumbwaiter may have been installed. (STRATA 2017)



Figure 4.79. Remnants of the original dumb waiter, including side panels, the weight pocket, and parts of the cab. (STRATA 2017)



Figure 4.80. Remnants of the original dumb waiter, including side panels, the weight pocket, and parts of the cab. (STRATA 2017)

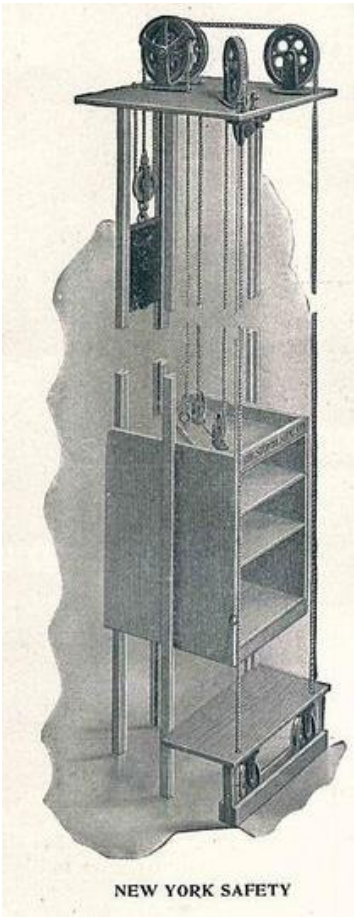


Figure 4.81. Sample of dumb waiter mechanical system. There were multiple variations for pulley and counterbalance systems. (Advertisement by The Lockwood-Luetkemeyer-Henry Co. for Dumb Waiter Fixtures, no date, https://www.pinterest.com/pin/519321400760345396accessed. October 24, 2017.)

Rooms 002 and 003

Rooms 002 and 003 are located under the west porch. These rooms have outer stone walls and a stone dividing wall, while the east wall is double-wythe brick, bearing on a stone footing. The rooms are each approximately 95 square feet, with dimensions of 7'-2" (east/west) by 12'-10" (north/south). Ceiling heights to the underside of the joists vary between 7'-2" and 7'-4". These two rooms are part of the ca. 1900 new basement foundation. The north Room 003 was used for coal storage, while the south Room 002 was used for food storage.

Concrete flooring was poured in these rooms during the 1976 rehabilitation project. In Room 002, the floor was poured around vertical steel legs, likely from some type of shelving system.

The rooms are lit with small windows, set near the ceilings. The north and south window glazing is plexiglass. There is a hole in the south Window 009. A four-light window is located in the center of the dividing wall, also near the ceiling. Doors into these spaces appear to be old, although their origin and age are unknown. Door 4/001, which leads into Room 003 appears to be original or early to this opening. The door is deteriorated and requires restoration. The

threshold is deteriorated. Door 1/002, leading into Room 002 appears to be a replacement door, although it is old. It too is deteriorated, as is the threshold.

The stone exterior walls are damp and are taking on water. Both the stone and brick walls require repointing.

The ceiling framing is comprised of wood joists, which were installed during the 1976 west porch reconstruction. The joists are not pressure treated but appear to be in good condition at this time.

Through the crack between the eastern-most ceiling joist and the brick wall, the sill log for the wall above is visible. A section of the sill log above the door appears to be original, while the section to the north is replacement material. There is a metal strap and bolt connection between the two sections that is rusted.



Figure 4.82. Basement 002, looking south. (STRATA 2017)



Figure 4.83. Basement 002, looking north. (STRATA 2017)

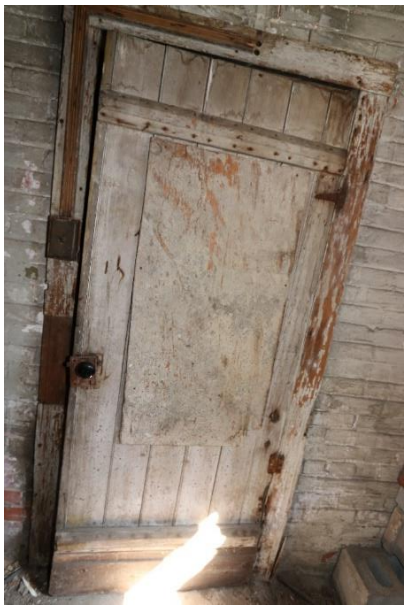


Figure 4.84. Basement 002, door. (STRATA 2017)



Figure 4.85. Basement 003, looking north. (STRATA 2017)



Figure 4.86. Basement 003, looking north. (STRATA 2017)



Figure 4.87. Basement 003, looking south. (STRATA 2017)

Room 005

Room 004 is located under the east porch. This room has outer stone and brick foundation walls and the west wall is double-wythe brick. The room is approximately 204 square feet, with dimensions of 7'-7" (east/west) by 21'-1" (north/south). This room was constructed as part of the ca. 1900 new basement project. The north section had a small room, which may have been used as an office. There was a small center hall, and to the south, the kitchen. This section of the kitchen was linked through an arched opening in the west wall to the larger part of the kitchen in the main part of the basement. The kitchen sink and some cabinetry were installed along the south wall of Room 004. A photograph of this condition can be seen in the Building Chronology section of this report (Figure 2.75).

Porch metal decking is exposed along the top of the ceiling. An exposed steel beam runs along the west wall. The beam is pocketed into the north and south stone walls and supported by three steel columns, which are set atop concrete footings. This structural system was installed to support the western-most edge of the east porch concrete slab during the ca. 1976 porch reconstruction. Concrete flooring was poured in this room at the same time.

A pair of 1/1 double-hung wood windows are installed in the south wall and north wall, and a single1/1 window is installed in the south side of the east wall. Some of the historic interior trim remains at these windows. The windows are deteriorated and require restoration. They are covered with interior storm windows.

Remnants of the historic millwork and finishes are visible throughout this room. Sections of painted beaded board wainscoting and lath and plaster are visible. Much of this was removed when the porch above and sections of the foundation walls were rebuilt in 1976.

The gas, electric, and water services enter the building through this room. The gas enters through the east wall, near the south corner. The electrical enters through conduit in the

southeast corner. The water line from the well enters through north wall. Electrical panels for the house are installed along the west wall of the room. From this point, all electrical distribution for the main house and outbuildings occurs. Exposed plumbing piping is located along the south wall that once served the kitchen sink. A floor drain is located in the southeast corner of the room.

The stone exterior walls are in good condition, requiring only spot repointing. A door opening in the east wall leads to the basement entry Room 006 from the rear yard.

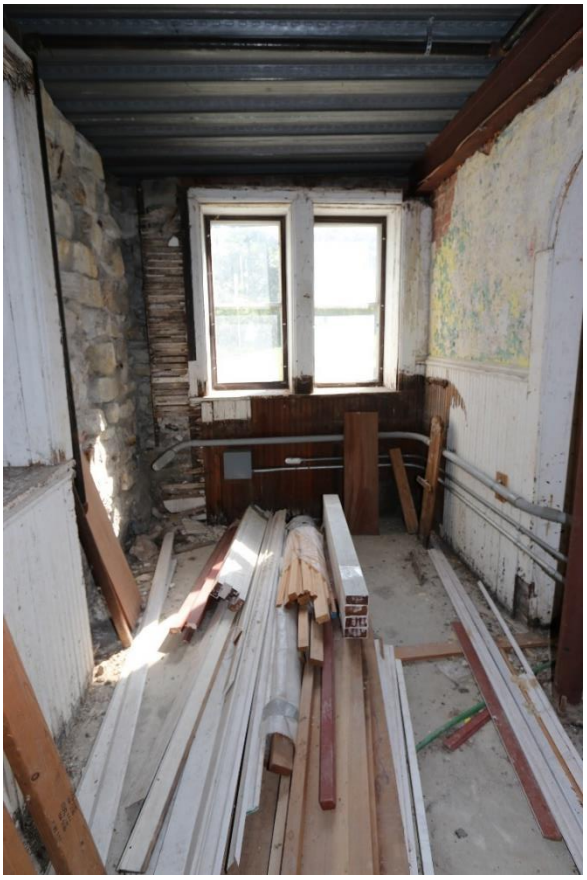


Figure 4.88. Basement 005, looking south. (STRATA 2017)



Figure 4.89. Basement 005, looking southwest. (STRATA 2017)



Figure 4.90. Basement 005, west wall. (STRATA 2017)



Figure 4.91. Basement 005, looking north. (STRATA 2017)

Room 006

Room 006 is located under the landing of the east stairs. This room has outer cast concrete block and concrete masonry unit foundation walls and the west wall is stone. The room is approximately 64 square feet, with dimensions of 7'-5" (east/west) by 8'-8" (north/south). This room was constructed as part of the ca. 1900 new basement project and was completely rebuilt during the 1976 porch reconstruction. The metal porch decking is exposed at the ceiling.

Two entries are located into this space. The north entry is a five-paneled wood Door 3/006 that leads to the north yard. This door is deteriorated and in poor condition. The south entry is a five-paneled wood Door 2/006 with matching sidelights. This assembly was reconstructed during the 1976 project. The floor is concrete. Electrical conduit is exposed along the south and west walls.



Figure 4.92. Basement 006, looking east. (STRATA 2017)



Figure 4.93. Basement 006, looking south. (STRATA 2017)



Figure 4.94. Basement 006, looking southwest. (STRATA 2017)

Existing Conditions Interior – First Floor

The first floor has approximately 823 gross square feet and contains two small entry foyers from each of the east and west porches (Rooms 100 and 102), a Parlor 101, Conservatory 103, and a Dining Room 104.

West and East Foyers (Rooms 100 and 200)

The West Foyer 100 is the primary entry from the front porch, while the East Foyer 102 is the entry from the east porch (Figures 4.95 – 4.100). The rooms are quite small, measuring only 4'-5" to 4'-7" east/west by 4'-0" north/south. These rooms are raised above the adjacent Parlor and Dining Room by 7-1/4 inches to 9-inches, and are accessed by a small step into each room. While the rooms are similar, the steps into each of the rooms vary. Steps to the west foyer are fully outside of the room, set within the Parlor, while the steps to the east foyer are constructed within the wall thickness and the Foyer room itself. The nosing at the top tread on the east side is missing. Trim in these spaces is stained and simple with decorative bullseye corner blocks and plinths at the doors and profiled baseboard. The walls are lath and plaster, which are in poor condition. The ceiling is lowered approximately six inches below the adjacent Dining Room and has a textured, painted finish coating. The coating should be tested for asbestos during a follow-up investigation. There is a single recessed light in the center of each room. The wood floors are the narrow strip wood flooring found throughout the first floor.

The south wall in the west entry is offset, where the security and fire alarm are installed. There are holes and large cracks in the south wall. There are holes through the top of the exterior door trim. The exterior doors are likely reproductions or salvaged from another location. The hardware does not match anything else in the house.



Figure 4.95. View West Foyer 100.
(STRATA 2017)



Figure 4.96. View West Foyer 100.
(STRATA 2017)



Figure 4.97. View West Foyer 100.
(STRATA 2017)

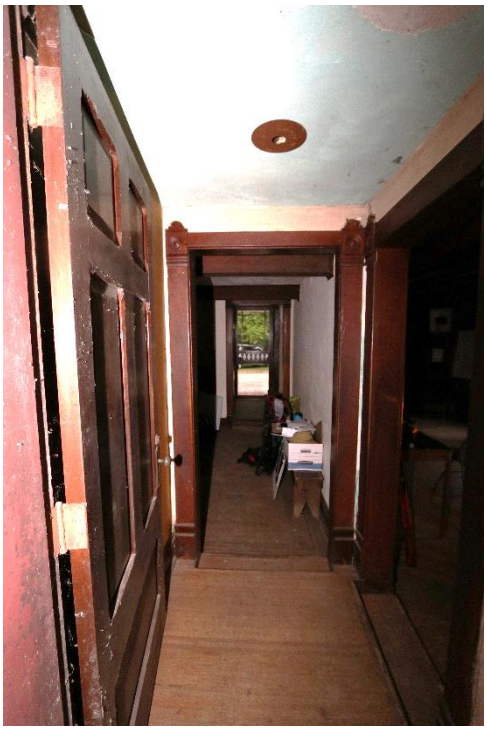


Figure 4.98. View East Foyer 101.
(STRATA 2017)



Figure 4.99. View East Foyer 101.
(STRATA 2017)



Figure 4.100. View East Foyer 101.
(STRATA 2017)

Parlor 101

The Parlor 101 is located in the southern half of the first floor and represents the primary living area (Figures 4.101 – 4.105). The room is large, measuring 21'-1" east/west by 16'-6" north/south with a total of 288 square feet. This room is approximately 7-1/4-inches to 8-1/4-inches below the foyers, which are nestled into the Parlor's northwest and northeast corners. The room is naturally lit with three 9/9 windows, one each in the east, south, and west walls. The interior finish of the window sashes and surrounds is stained. The window frames appear to be original to the construction of the ca. 1834 house. The sashes, frames, and hardware are in various states of maintenance and require restoration. A door with a small step up in the south wall leads to the Conservatory. The wood floors are a narrow strip wood flooring with decorative banding at the perimeter. The floors have no visible protective finish and are worn. The thin wood strip flooring is unusual, but they are found throughout the house. They may have been installed in 1899.

A large fireplace and surround is centered on the south wall. The date and origin of the existing wood firebox surround is unknown. It appears unfinished, as open areas look ready for additional paneling or plastering. The firebox surround is exposed brick. Some details are similar to paneling surrounding the Dining Room stair, but it is difficult to see any other familiarities with anything else in the house. Ductwork is concealed in the east and west sides of the surround, and the millwork is damaged from the installation of grilles and the temporary structural posts. The firebox and hearth have been reconstructed at an unknown date. The firebox is constructed with a fireproof masonry stamped with 'S.B.'. A search for this manufacturer only reveals that it is a refractory brick, but the manufacturer is unknown at this time. If the manufacturer were found, it may help to date the firebox reconstruction. The hearth is slate tile over a thin set mortar. Decorative tiles depicting the history of the Bailly Homestead that Frances Howe had made were supposedly meant for this fireplace; however, the layout does not fit with this fireplace surround configuration. The tiles are in the INDU Museum Collection.

Trim in the Parlor is stained and simple with decorative bullseye corner blocks and plinths at the doors and profiled baseboard. A small section of baseboard is missing on the east wall, adjacent to the entry. A section is broken on the north wall. Corner boards are installed at the foyer walls, which appear to be a later addition. The walls are lath and plaster over logs on the east, south, and west walls and lath and plaster over wood framing on the north wall. The plaster finish is in poor condition. The ceiling is lowered for the installation of supplemental contemporary wood second floor framing. The ceiling is drywall with a textured coating that tested negative for asbestos during the 2017 assessment, but it should be tested for asbestos during a follow-up investigation as a precaution, since other textured coatings on upper floors tested positive.

Two clad wood-clad I-beams span the Parlor, flanking the fireplace in the north/south direction. The beams rest on solid square posts buried within the north wall between the Parlor and the Dining Room and rest on exposed wood posts set proud of the south wall. An adjustable lally column is installed outward of the face of the fireplace below the west beam. The column rests

on a solid wood blocking to disperse weight. The beams were installed ca. 1960s by a local contractor. The lally column was installed in 2015 or 2016. The southwest post appears to be crushing the wood flooring, but further investigation should be warranted, as the posts and beam above do not appear to be carrying much, if any load.

There is no overhead lighting in this room. The soil stack for the upper floor restroom is located in the southeast corner of the room and is sheathed with varnished boards which have also been painted. The boards were installed over the historic baseboard and were cut to fit the profile of the baseboard.

With the exception of the fireplace surround and the exposed wood beams at the ceiling, the room likely appears very much like it did near the end of the period of significance in 1918.



Figure 4.101. Parlor 101, looking east. (STRATA 2017)



Figure 4.102. Parlor 101, looking south. (STRATA 2017)



Figure 4.103. Parlor 101, looking south and west. (STRATA 2017)



Figure 4.104. Parlor 101, looking north and east. (STRATA 2017)



Figure 4.105. Parlor 101, Detail at step up into Conservatory 103. Note the wood post and surrounding wood floor damage. (STRATA 2017)

Conservatory 103

The Conservatory 103 is accessed through a door in the south wall of the Parlor (Figures 4.106 – 4.108). This door location was an original window location that was expanded to receive the door opening. The Conservatory was constructed ca. 1904 for the care of plants. The addition is wood frame with rusticated cast concrete block veneer on the exterior. The roof is wood frame and is hipped. When the Conservatory was first constructed it had a glazed skylight, as seen in Figure 4.65. The skylight was removed sometime after 1924 and the roof was re-framed with contemporary framing and plywood sheathing.

The room is quite small. The landing is only 28 sf. One set of steps down leads to the lower floor area, which is only 42 sf. The second, matching set of steps has been removed. The entire floor and steps are finished in the same narrow strip wood floor as the rest of the first floor. Wood flooring is an unusual floor finish for a conservatory for the care of plants. The floors and steps have no visible protective finish and are worn. The walls are clad in varnished beaded board. Trim in this room is stained and simple with decorative bullseye corner blocks and plinths at the doors and profiled baseboard.

There are windows on three sides of the room. Windows on the east and west are traditional double-hung windows, while the windows in the south wall are fixed panels of leaded glass in the top sash and large fixed sash on the bottom. The western-most leaded glass window is broken, and active wasp nests were seen between the window and the interior storm window. A sink was once installed in the northeast corner of the room where the piping remains. Heat was provided by a register in the front of the landing. The ceiling is vaulted to expose the contemporary framing. An outline of a wall sconce can be seen on the north wall of the room, which has since been removed.



Figure 4.106. Conservatory 103, looking south. Note the conventional framing at the roof where the glazed skylight was removed. (STRATA 2017)



Figure 4.107. Conservatory 103, looking northwest. (STRATA 2017)



Figure 4.108. Conservatory 103, looking northeast. Note the piping in the corner for a wall-mounted sink, which has since been removed. (STRATA 2017)

Dining Room 104

The Dining Room 104 is located in the northern half of the first floor (Figures 4.109 - 4.115). The room is accessed from both the West and East Foyers through the south wall, and also by the stairs from the basement and second floor, which are located in the northeast corner of the room. The room is large, measuring 21'-1" east/west by 11'-6" north/south, for a total of 200 sf. This room is approximately 9-inches below the adjacent two foyers.

The Dining Room was the crown jewel of the ca. 1900 renovations to the home by Frances Howe, having it renovated and outfitted in the late Victorian period Eastlake Style. The room was used for dining and also for religious services. Because this room faces north, and the east/west windows are protected by the porches, the room is very dark.

The room is naturally lit with three 9/9 windows and one 6/6 window, one in the west wall, two in the north wall and one in the east wall. The interior finish of the window sashes and surrounds is stained. The window frames appear to be original to the construction of the ca. 1834 house, except for the 6/6 window in the north wall at the stairs, which was shortened when the stairs

were installed ca. 1900. The sashes, frames, and hardware are in various states of maintenance and require restoration. The wood floors are a narrow strip wood flooring found throughout the first floor with decorative banding at the hearth only. The floors have no visible protective finish and are worn.

The walls are clad in varnished beaded board. The lower third of the wall is laid vertically, and the upper section of wall is laid on the diagonal to create patterns. The upper and lower portions of the wall are separated with a piece of wood trim. A majority of the diagonal boards are the same size, while the lower sections are varying width. Trim in this room is stained and simple with decorative bullseye corner blocks and plinths at the doors. The finish of the boards and trim is in poor condition.

The hand-planed second floor beams are exposed at the ceiling. The beams are relatively smooth in finish and have slightly chamfered outside corners. Between the beams, varnished diagonal beaded boards have been installed. The beams were altered at the second floor stair opening, causing some structural distress at the first and second floor framing. This is further discussed in the Structural section of this report. The west end of the center beam is deteriorated, as it is pocketed into the log wall above Window 103. The bottoms of the beams are riddled with cut nail holes, which indicates these were likely originally clad with a wood board ceiling, as described in Frances Howe's book.

Exposed wood wire molding is visible throughout the room and is stained to match the beaded board finishes. The date the wood wire molding was installed is unknown. If sections are removed in the future, it would be interesting to determine if there is a finish on the wood wall boards below the wire molding. If there is no finish, it would suggest that the wire molding was installed when the room was renovated. The wire molding throughout the house is concealing cloth wires which are in poor condition. Brass fixtures are installed on the underside of the beams that once held glass globes. One of the brass fixtures near the fireplace was a pendant light.

Ductwork and wiring was installed inside the south wall during the 1976 rehabilitation. Disturbed sections of beaded board wall are visible on the east and west sides of the wall where this occurred. Several boards are missing, and the vent does not look like it belongs to this room (Figure 4.109).

The focus of the room is the decorative mantelpiece, which is installed diagonally in the northwest corner of the room. Oral history states that this was hand-carved by a local craftswoman, but is appears to be a manufactured mail order mantelpiece. Two of the panels are exactly the same, but one was flipped 180 degrees to appear different; a hallmark of a mass-produced item. The mantel is currently installed with screws through the face of the wood. The glazed tile hearth is in poor condition, with the glaze flaking from the tile. This glaze tested positive for lead during the assessment. A lithograph of Right Rev. Jacques-Maurice De Saint Palais, who served as Archbishop of Indianapolis from 1848 until his death in 1877, is recessed

in the upper mantel. This unusual feature appears to be original to the installation of the fireplace surround.

Several sources mention there was once a dumb waiter installed in the Dining Room to bring food from the basement kitchen. Sections of the paneling and lift were found in the basement, but there is no evidence in the existing finished floor of any hole through the floor. There is no patching and the wall is not thick enough to have concealed a dumb waiter. So, either the floor has been replaced since the dumb waiter was removed, or its location is a mystery. There is an outline on the beaded board wall at the east section of the south wall where the varnish is a different color, and there is additional quarter round installed. This may indicate the installation of casework and the dumb waiter. When the basement ceiling is removed, the underside of the subfloor may give some clues as to its location, which was likely in the east section of the south wall.



Figure 4.109. Dining Room 104, looking southwest. (STRATA 2017)



Figure 4.110. Dining Room 104, looking west. (Sheals 2017)



Figure 4.111. Dining Room 104, looking southeast. (Sheals 2017)



Figure 4.112. Dining Room 104, looking east. (Sheals 2017)

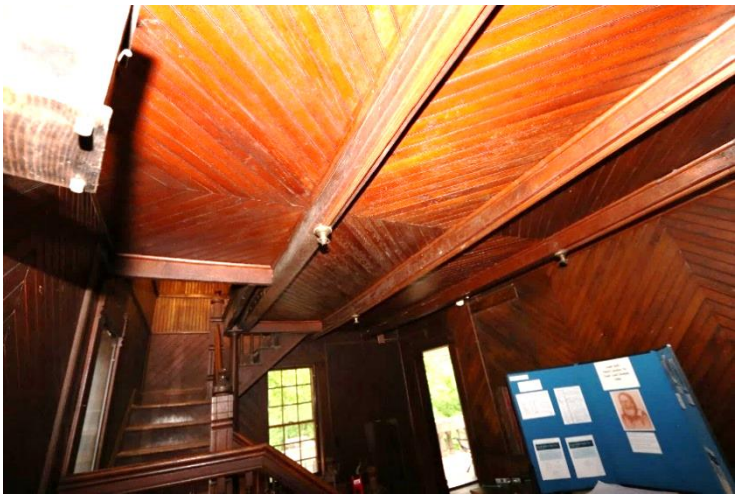


Figure 4.113. Dining Room 104, Ceiling detail. (STRATA 2017)



Figure 4.114. Dining Room 104, mantelpiece. (STRATA 2017)

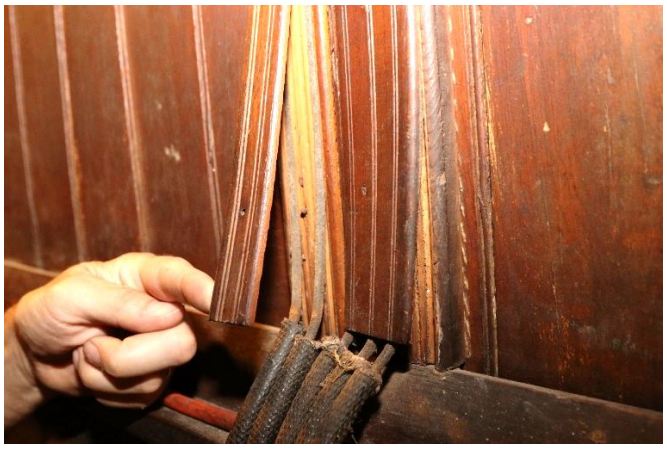


Figure 4.115. Dining Room 104, wood wire molding with cloth wiring. (STRATA 2017)

Stairs – Basement to Second Floor

The stairs to the basement and second floor are located in the northeast corner of the Dining Room. These stairs were constructed as part of the ca. 1900 renovation. The original stair location and configuration to the second floor is unknown. Because the ca. 1834 house was set over grade, there was no basement until the ca. 1900 renovation.

The stair to the basement is a quarter-turn, with winders at the turn and a straight run at either end. The stair is enclosed at the bottom with a door. The stair to the second floor is a U-shaped stair with a full landing at both turns.

The stair railings are oak and appear to be manufactured mail order type of materials popular during the late Victorian period. They portray many features prevalent in the Eastlake Style, including the turned balusters and square newel posts with decorative turned caps and gougework. Stars set within circles are lightly etched into the surface of each side of the newels. Walls below the stair and landing are paneled. There is a small storage closet under the second floor stairs that is accessed overhead from the basement stair.

The stairs to the basement are in poor condition. The stair treads and stringers are deteriorated and the stairs are unsafe. Structural modifications made when the stairs were originally constructed, included modifying the second floor framing and portions of the first floor framing to frame the new opening. These modifications are not structurally sound, and the resultant sagging of the structure has caused partial failure of the basement vertical post resulting in the buckling of the first floor under the exposed turned post. The settlement at the first floor has also affected the paneled wall under the stair and the storage closet access door. These framing modifications are further discussed in the Structural section of this report. There is no handrail at the basement stair.

The stairs to the second floor are in fair condition. The treads are covered with plastic covers, which were likely added to reduce the wear. Some of these are loose and pose a trip hazard. The stair treads are supported by stringers, which are further discussed in the Structural section of this report, as their support at the upper quarter turn is unknown. The railings are low, with a height of only 32-inches and do not meet the current graspability required by building code. Nor do the railing heights at the first and second floor landings meet current guard rail height. The railings are stable and are in fair condition. The varnish is worn and they are very dirty.



Figure 4.116. Dining Room 104, stair details. (STRATA 2017)



Figure 4.117. Basement stair details.
(STRATA 2017)

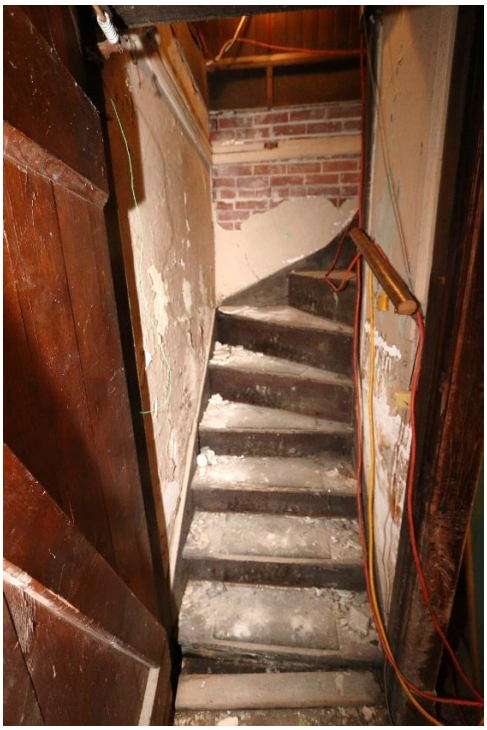


Figure 4.118. Basement stair details.
(STRATA 2017)



Figure 4.119. Dining Room 104 stair details.
(STRATA 2017)



Figure 4.120. Dining Room 104 stair details.
(STRATA 2017)

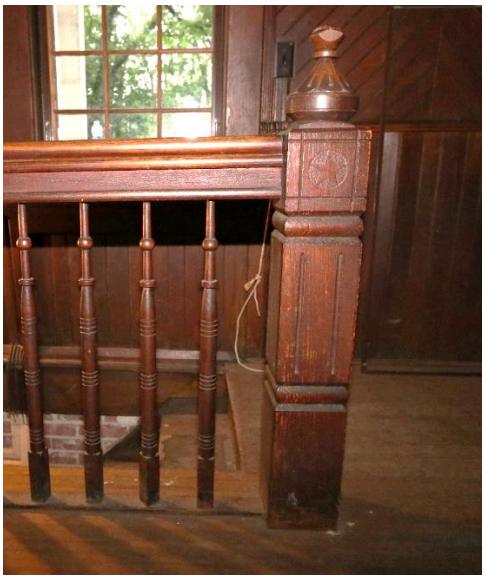


Figure 4.121. Dining Room 104 stair details. (STRATA 2017)



Figure 4.122. Dining Room 104 stair details. (STRATA 2017)



Figure 4.123. Dining Room 104 closet under second floor stair. (STRATA 2017)

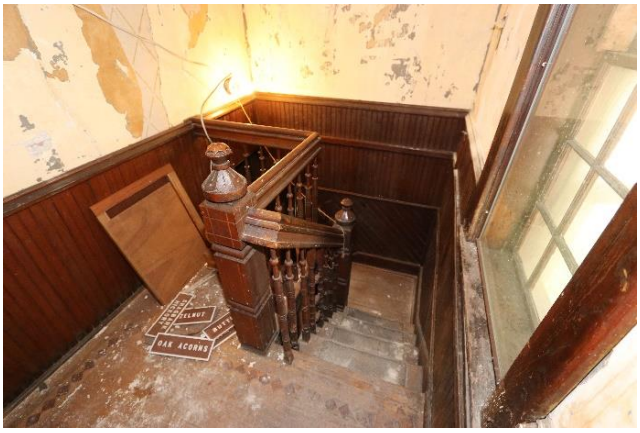


Figure 4.124. Second floor stair details. (STRATA 2017)

Existing Conditions Interior – Second Floor

The second floor has approximately 798 gross square feet, including Hall 200, three bedrooms, and a single closet.

The configuration of the second floor before the ca. 1900 renovation is unknown. The existing window openings in the main block of the house are original, as are the door locations to the east and west porches. The original stair locations and configurations to the first and third floors are also unknown.

Hall 200

The L-shaped second floor Hall 200 is approximately 118 square feet (Figures 4.125 -4.133). From the Hall, there are three bedrooms and two sets of stairs, one leading to the first floor and the second stair to the third floor. The finishes in the Hall are a continuation of those seen in the Dining Room below.

Door and window trim in the Hall is stained and simple with decorative bullseye corner blocks and plinths. A 9/9 double-hung window lends natural light to the stair. The window frame appears to be original to the construction of the ca. 1834 house. The date of the sashes is unknown. The interior finish of the window sash and surround is stained. The sashes, frame, and hardware are in various states of maintenance and require restoration. The top of the window jamb is deteriorated from moisture infiltration. The top sash has added trim to make the sash ‘thicker,’ likely due to wall deterioration or an anomaly in the log wall at this location.

The doors on the second floor appear to all date to the period of significance. Door 1/200 to the east porch is located in the east wall. Some of the casework is missing. The origin of this door is unknown, but the opening and buck frame are original to the ca. 1834 construction. The door matches or is similar to other interior doors on this floor. The threshold at this door is nearly two inches tall. The doors into the southwest and west bedrooms match the door to the porch. Door 1/201 into the southeast Bedroom 201 is an anomaly, compared to the other two rooms. This door is a vertical board and batten door with a thumb latch. Door plinths are missing on either side of this door. The age and origin of this door are discussed below in the Bedroom 201 section.

An opening in the center of the east wall was covered from the exterior by the sheathing and siding during the 1976 rehabilitation. A section through the exterior log wall is visible, as the opening has not been infilled on the interior. The 1975 drawings indicated the work “removed serving port, closed opening with new siding.” The function of this opening is unclear. Perhaps this was related somehow to a dumb waiter associated with the 1950s restaurant. The ends of the logs at this opening are unsupported, as there is no chinking or dowels visible. The typical dimension of the logs is 12-inches high by 6-inches wide. The interior face of the logs show evidence of old whitewash. There is no visible daubing remaining.

The wood floors in Hall 200 are a narrow strip wood flooring found throughout the first floor; however, parquet inlays with varying species of wood create an interesting patterned border at the perimeter of the room (Figure 4.132). The floors have no visible protective finish and are worn.

The walls are clad with a vertical beaded board wainscoting and chair rail, varnished to match the walls in the first floor Dining Room. The upper portion of all walls (except for the south wall) and the ceiling are lath and plaster with several layers of wallpaper and painted finishes. The ceiling has a textured coating which tested negative for asbestos during the 2017 assessment, but it should be tested for asbestos during a follow-up investigation as a precaution, since other textured coatings on upper floors tested positive. The lath and plaster walls and ceiling are in poor condition. There is a small painted picture molding at the ceiling. The south upper wall is diagonal beaded board. The board walls are in fair condition, with sections of boards and chair rail missing. Some missing sections were cut away for the previous wood wire molding installation. The board wall requires refinishing.

A hole in the north side of the hall due to previous water infiltration damage exposes the third floor framing. The third floor framing visible through the hole in the ceiling is deteriorated. The topmost visible log in the east wall is cut at the north side of the Window 203, where it was patched with new newer material during the 1976 rehabilitation. There are at least two layers of floor beams or joists, and the third floor board subfloor visible. One of the original ca. 1834 beams is visible, as are supplemental joist dimensional framing members. The ends of the beams are deteriorated as they pocket into the exterior log wall. It is unclear if this area is still receiving moisture infiltration, or if this is an older condition that was not corrected during previous rehabilitations. This is further discussed in the Structural section of this report.

Wood wire molding is laid across walls and throughout the ceiling. Joints in the ceiling are coupled with porcelain insulators, which are labeled ‘PAISTE PATENTED NOV. 25 1902’ (Figure 4.133). The wire molding conceals cloth wiring. A wall switch in this room is a push button. A wall sconce was once installed at the east wall of the stairs to the first floor. Exposed wires are visible above the doors into the south bedrooms. A motion detector and smoke alarm are installed in the Hall, but their functionality was not verified.

An offset in the wall at the turn of the hall conceals ductwork that was likely installed during the 1970s rehabilitation project. All of the beaded board wainscoting and chair rail is missing at this location. A hole in the wall adjacent to this offset shows that the dividing wall between Hall 200 and Bedroom 203 to the west is very thin. Wall framing consists of nominal 2x4 studs turned flat, resulting in cavities 1 1/2-inches in depth.

The stairs to the first floor are discussed in the First Floor Dining Room 104 section of the report. The stairs to the second floor are tucked into the southeast corner of the room (Figures 4.126 – 4.130). The lower section of four treads are winders, leading to a straight run to the third floor. This staircase is narrow and has a square newel post, topped by a round newel cap. The newel post has been cut in half and has had many repairs, including at its attachment to the

newel. The handrail is massive for such a tiny stair. Each tread should have two turned balusters, but most are missing. It is speculated that the newel may have had to be cut in half in order to move large items up the stairs, such as the large cast iron tub found on the third floor. Unless items were hauled through windows, the stairs were the only option. There is a gap between the risers and the newel post, and the stairs are a little springy with more than one person on them at a time. The underside of the staircase is exposed and is clad in wood paneling, one section of which is missing.



Figure 4.125. Hall 200, looking north toward stair to first floor. (STRATA 2017)

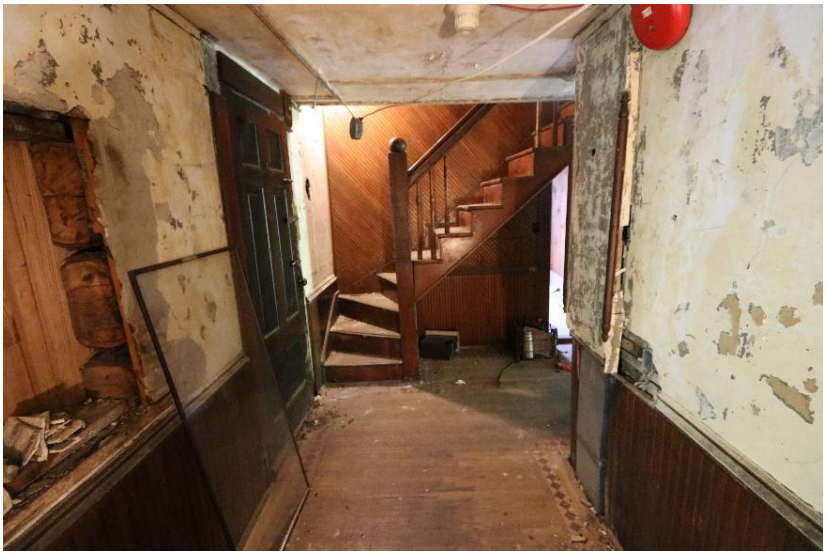


Figure 4.126. Hall 200, looking south toward stair to third floor. (STRATA 2017)



Figure 4.127. Hall 200, looking west.
(STRATA 2017)



Figure 4.128. Hall 200, stair to third floor.
(STRATA 2017)



Figure 4.129. Hall 200, looking east.
(STRATA 2017)

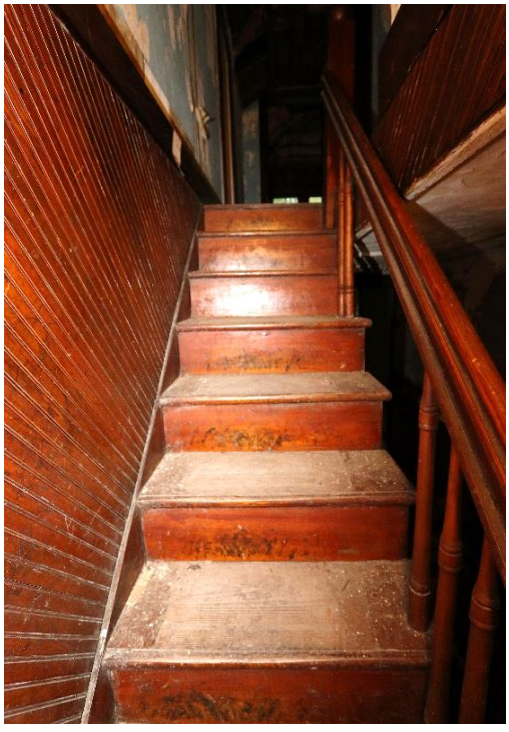


Figure 4.130. Hall 200, stair to third floor.
(STRATA 2017)



Figure 4.131. Hall 200, Wall offset detail with ductwork. (STRATA 2017)



Figure 4.132. Hall 200, parquet flooring detail. Hall detail on the right, detail of adjacent Bedroom 203 on the left. Taken at Door1/203. (STRATA 2017)



Figure 4.133. Hall 200, wire molding porcelain insulator. Patented 1902. (STRATA 2017)

Bedroom 201

Bedroom 201 is located in the southeast corner of the second floor. The small bedroom is approximately 94 square feet, plus a small raised nook or closet area, which is 21 square feet (Figures 4.134 - 4.145). The room is approximately 9'-7" (east/west) by 9'-9" (north/south); the nook is 9'-1" by 2'-1". The finishes in this room are distinct, not matching other finishes in the house. The floor slopes from the southeast corner towards the northwest corner several inches.

The east and south walls are lath and plaster over the original exterior log walls, with a simple beaded baseboard. The lath and plaster walls are in very poor condition and are delaminating and cracked throughout. There are several layers of papering and paint. These may be good locations for future interior paint color testing. Holes in the south and east walls reveal the original log exterior walls. The daubing is clay and very lightweight. The interior face of the logs is whitewashed.

The west and north walls are unfinished vertical tongue and groove wide plank boards with a petite bead. The ¾-inch thick boards appear to be hand-planed and vary in width from 10.5-inches to 21-inches. The west wall has a painted beaded baseboard, similar to the east and south walls. The base is capped with a small piece of finish trim along the west and south walls, to cover a gap between the baseboard and the wall. The north wall has only a double shoe molding. The extra piece may be to cover a gap resulting from the sloping floor.

The vertical tongue and groove Door 1/201 is similar to the wood board paneling on the walls. The door has been reversed to swing in its current direction, as wood Dutchman patches are visible on the door. The hardware for the door includes a thumb latch and hinges. Removal of the screws reveals they have pointed tips, so they likely do not date to the original ca. 1834 house.[342] The trim on this door also is different than that in other spaces in the house.

Along the ceilings, four original hewn wood beams are exposed. These beams span from the outer east log wall to the outer west log wall. The end of the beam (second from the south) is deteriorated where it pockets into the log wall. This is further discussed in the Structural section of this report. Above the beams is a ¾-inch tongue and groove board ceiling. Above this layer of board ceiling, there are 7/8-inch thick sleepers installed. These are topped with the third floor finish floor which is nearly 1-inch thick. In all, this floor system is approximately 2 1/2-inches thick. Theories regarding the installation of the sleepers include that they were used to level a very uneven third floor.

The floors of this room are wide plank tongue and groove and are painted a blue/gray color. This is the only room in the house with these type of wood floors. The floor is deteriorated surrounding the soil stack and water piping in the southeast corner.

[342] Handmade and early machined screws were made with blunt tips until they were modern-machined in the mid- twentieth century, which have pointed tips.

The old window opening in the south wall leads to the raised nook or closet space. The interior face of the jambs is laminated with a very thin wood, which may be covering the original openings in the jambs for sash pockets. The trim on this opening matches the east Window 204 and also the nook side of the opening. The sill of this opening is cracked. This nook area was constructed as a bump-out, several feet deep at the second and third floors during the ca. 1900 renovation. Two 9/9 double-hung windows are installed in this nook (Windows 205 and 206). The floor of the space is approximately two-feet above the finish floor of the room. The flooring is tongue and groove, and has been partially removed, exposing the framing of this bay. Remnants of old clothing hooks are found on the walls, as this was likely used as a closet space for this bedroom.

A 9/9 double-hung Window 204 is located in the east wall. This window is covered with an interior storm window. The frame appears to be original to the construction of the ca. 1834 house. The date of the sashes is unknown. The sashes are held open with a unique sash 'claw' (Figure 4.141). No other windows in the house have this style of sash hardware. The window sashes are in poor condition, and the top sash is deteriorated. The top of the window head is sloping towards the middle of the house, creating a racked frame. The window trim is different than the rest of the house, and is perhaps one of the older trim types remaining from the original construction. The pair of double-hung windows in the nook date to the ca. 1900 renovation. These windows are deteriorated and require restoration. The sashes do not close properly, and have allowed a very large wasp nest infestation between the historic sash and the interior storm window, as seen during the August 2017 site visit. There are interior storm windows installed at all three windows.

An old cast iron floor grate is installed in the southwest corner of the room. The grate is broken and is unsafe to walk on. A screened vent is located in the northeast section of the ceiling, which is open to the third floor bathroom above. Wire molding is installed on the walls and ceiling. A brass fixture is installed in the center of the room, but there is no globe. In the southeast corner of the room, the soil stack and water piping are exposed; these lead to the third floor bathroom above. Holes in the ceiling reveal where the water piping was located for the claw foot tub on the third floor above this room.

This room and its finishes pose a bit of a mystery. The appearance of the room is almost like a museum to an earlier period of a house. Specifics on this room are not available from when Frances updated the house with the major renovations ca. 1900. If these interior board walls are original to the ca. 1834 house, they would indeed be important to its early history and perhaps give some idea of the earlier interior finishes. However, there are too many inconsistencies in the space to make it believable that only this one room in the house 'survived' the major renovations that the entire rest of the house was subjected to. For instance, the flooring in this room is higher than in other rooms on the second floor, indicating that there have been some types of changes to this room, separately from the adjacent hall and other spaces. There are absolutely no hints of the late Victorian or Eastlake influence in this space, save for the construction of the nook space. The lath installed on the exterior log walls is installed with wire

nails. The trim on the windows and the beaded baseboard are different than anywhere else in the house, as is the wood flooring and exposed wood ceiling. The wood floor is also slightly higher than the adjacent hall flooring. No cut nails were found, which would pre-date the1890s.

Perhaps this one room was preserved at the wishes of Marie, as oral history passed down suggests. When future renovations are underway, removal of the ceiling from the Parlor below and the interior wall finishes from the shared wall in Bedroom 202 may yield further information to help communicate this story.



Figure 4.134. Bedroom 201, looking southeast. (STRATA 2017)



Figure 4.135. Bedroom 201, looking southeast at the ceiling with exposed beams. (STRATA 2017)



Figure 4.136. Bedroom 201, looking south. (STRATA 2017)



Figure 4.137. Bedroom 201, looking west. (STRATA 2017)



Figure 4.138. Bedroom 201, looking north. (STRATA 2017)



Figure 4.139. Bedroom 201, Door 1/201 detail. (STRATA 2017)





Figure 4.140. Bedroom 201, Deteriorated and racked Window 204 and sash claw detail. (STRATA 2017)



Figure 4.141. Bedroom 201 Nook, looking south at Windows 205 and 206. (STRATA 2017)



Figure 4.142. Bedroom 201 Nook, looking east. (STRATA 2017)



Figure 4.143. Bedroom 201 Nook, looking west. (STRATA 2017)



Figure 4.144. Bedroom 201 Nook, looking south at wasps' nest in Window 205. (STRATA 2017)



Figure 4.145. Bedroom 201 Nook, detail at flooring. (STRATA 2017)

Bedroom 202

Bedroom 202 is located in the southwest corner of the second floor. The bedroom is approximately 109 square feet, plus a small raised nook or closet area, which is 21 square feet (Figures 4.146 - 4.154). The room is approximately 11'-10" (east/west) by 9'-5" (north/south); the nook is 9'-2" by 2'-1". The floor slopes from the southwest corner towards the center of the house two to three inches. A brick chimney is located in the southeast corner of the room. It is thought that this chimney pre-dates the ca. 1900 renovations and may be an early chimney. It is covered with wallpaper. There is a hole from an old stovepipe.

Trim in this room is stained and simple with bullseye corner blocks and plinths at the doors and profiled baseboard. All walls are lath and plaster over the original exterior log walls (south and west) or frame walls (east and north). The lath and plaster walls are in poor condition and are delaminating and cracked throughout. They are covered in patriotic wallpaper, which is concealing their condition. The wallpaper is in poor condition. A hole in the north wall reveals that the plaster keys have broken away from the lath. The ceiling is also papered and covered in a painted textured finish. The ceiling is cracked throughout. Ceilings on the second floor tested negative for asbestos during the 2017 assessment, but the textured coating should be tested for asbestos during a follow-up investigation as a precaution, as other textured coatings on upper floors tested positive.

The five-paneled Door 1/202 and hardware is similar to other doors installed in the second floor and are in fair condition.

The floors of this room are narrow strip wood flooring, which appears to be oak or a wood with a similar grain. These floors are installed in the east/west direction, the same direction as the floor

beams. The flooring is face-nailed at the north and west sides, while the rest of the floor is blind-nailed. This was likely to prevent buckling from the exaggerated floor slope. The floor slope has resulted in gaps surrounding the chimney and the south wall, where the trim has pulled away from the wall.

The old window opening in the south wall leads to a raised nook or closet space. The interior face of the jambs is laminated with a very thin wood, which may be covering the original openings in the jambs for sash pockets. The trim on this opening matches the west window and also the nook side of the opening. The sill of this opening is cracked. This nook area was constructed as a bump-out, several feet deep at the second and third floors during the ca. 1900 renovations. A single 9/9 double-hung Window 207 is installed in this nook. The floor of the space is approximately 1'-7" above the finish floor of the room. The flooring is tongue and groove and is in fair condition. Remnants of old clothing hooks are found on the walls, as this was likely used as a closet space for this bedroom. A vent pipe from a sink in the Conservatory is in the northeast corner. The walls in the nook are lath and plaster and are in poor condition. There is a small picture railing installed on three walls, near the ceiling. The baseboard in this nook is stained to match that of Bedroom 202, although the baseboard profiled between the two spaces differs. The trim in this nook is stained to match the bedroom.

The double-hung Window 207 in the nook dates to the ca. 1900 renovation. This window is deteriorated and requires restoration. The sashes do not close properly. There is an interior storm window installed. A 9/9 double-hung Window 208 is located in the west wall. This window is covered with an interior storm window. The window opening is likely original to the ca. 1834 construction, although the date of the frame cannot be verified. The jamb of the window frame has rounded areas that have been infilled where sash ropes and pulleys would typically be installed. The window sashes are in fair condition.

An old cast iron floor grate is installed in the southeast corner of the room. Wire molding is installed on the walls and ceiling. A brass fixture is installed in the center of the room, but there is no globe. Exposed wires are visible from the wall above the door.



Figure 4.146. Bedroom 202, looking west. (STRATA 2017)



Figure 4.147. Bedroom 202, looking north. (STRATA 2017)



Figure 4.148. Bedroom 202, looking east. (STRATA 2017)



Figure 4.149. Bedroom 202, looking south toward nook. (STRATA 2017)



Figure 4.150. Bedroom 202 Nook and Window 207, looking south. (STRATA 2017)



Figure 4.151. Bedroom 202 Nook, looking west. (STRATA 2017)



Figure 4.152. Bedroom 202 Nook, looking east. (STRATA 2017)



Figure 4.153. Bedroom 202 Detail at chimney and baseboard. (STRATA 2017)



Figure 4.154. Bedroom 202 flooring and grate. (STRATA 2017)

Bedroom 203

Bedroom 203 is located in the northwest corner of the second floor. The bedroom is the largest on the second floor and is approximately 216 square feet, plus a small closet, which is 18 square feet (Figures 4.155 - 4.164). The room is approximately 15'-11" (east/west) by 16'-2" (north/south); the closet is 8'-1" by 2'-3". The room is slightly L-shaped, with the closet located to the south of the room. A diagonal masonry chimney mass is located in the northwest corner of the room. A thimble from an old stovepipe can be seen near the base, above a sheet metal cleanout soot drawer.

Trim in in this room is stained and simple with bullseye corner blocks and plinths at the doors and profiled baseboard. Some of the trim is missing at the entry door and the French doors.

All walls are lath and plaster over the original exterior log walls (west and north) or frame walls (east and south). The lath and plaster walls are in poor condition and are delaminating and

cracked throughout. They are covered in floral wallpaper, which is partially concealing their deteriorated condition. The wallpaper is in poor condition. The lath and plaster ceiling is also papered and covered in a painted textured finish. The ceiling is cracked throughout. Ceilings on the second floor tested negative for asbestos during the 2017 assessment, but the textured coating should be tested for asbestos during a follow-up investigation as a precaution, since other textured coatings on upper floors tested positive.

The five-paneled entry Door 1/203 and hardware are similar to other doors installed in the second floor and are in fair condition. The French Doors 2/203 leading to the west porch are old and appear to be original to the ca. 1900 renovation. These are actually made from a larger paneled door, which was sawn down the middle to create French doors. The panels were removed and glass installed. The hardware is mostly missing or broken. The exterior storm door does not function well and is clearly contemporary. Because the inside trim surrounding the door is missing, the original door buck, or frame, is visible. The bucks have several visible cut nails to fasten the bucks into the end grain of the cut logs. Some daubing between the logs is visible. This indicates that this opening is likely original to the ca. 1834 construction. There is a door stop on the floor that is a tripping hazard.

The beaded board closet Door 3/203 is damaged. The shadow of the historic door hardware is unique and not seen in other locations within the house. The door hardware and mortise lock are missing. The beaded boards appear to be maple or a similar wood.

The floors of this room are narrow strip wood flooring with decorative parquet inserts in a geometric pattern, which creates a band at the perimeter of the room. The historic floors are being progressively damaged due to the foot traffic having ground plaster and debris into the surface.

Two 9/9 double-hung windows are located in the north wall (Windows 201 and 202) and one in the west wall (Window 209). These windows are covered with interior storm windows. The window openings are likely original to the ca. 1834 construction, although the date of the frames cannot be verified. The jamb of the window frame has rounded areas that have been infilled where sash ropes and pulleys would typically be installed. The sashes do not close properly, allowing wasps to build nests in the eastern-most Window 202. These windows are in fair condition and require restoration.

The original hewn beams, along with supplemental dimensional framing, are visible between the lath at the ceiling. The original beams appear to be a combination of natural and whitewash finishes. The supplemental joists appear to have been installed to support the lath and plaster ceilings. There are random boards, some which are whitewashed and some unfinished, that are placed between the beams at differing levels. The purpose of these is unclear, but this same detail is visible above Hall 202. Once the ceilings are removed for future rehabilitation, more exploration can be done to understand this chronology of building campaigns and the purpose for some of these boards.

An old cast iron floor grate in installed in the center of the room, near the door. A cast iron grate is also installed in the ceiling, which is a gravity vent only (no ductwork). The vent is labeled with a manufacturer name of “Tuttle and Bailey Manufacturing Company.” Wire molding is installed on the walls and ceiling. Evidence of wall sconces is seen where the oval blocks are installed in three locations. An old speaking tube is installed in the south wall. This is the only one remaining in the house, and the routing of the tube through the wall systems is unknown.

A wood box at the floor, in the northeast corner of the room, provides the headroom for the stairs from the first to the second floor. The top requires reconstruction.

The small closet is lined in varnished cedar. There are acorn-style hooks on the walls for clothing and built-in shelving.



Figure 4.156. Bedroom 203, looking north. (STRATA 2017)



Figure 4.155. Bedroom 203, looking west. (STRATA 2017)



Figure 4.157. Bedroom 203, looking east. (STRATA 2017)



Figure 4.158. Bedroom 203, looking south. (STRATA 2017)



Figure 4.159. Bedroom 203, Window 202 with wasps. (STRATA 2017)



Figure 4.160. Bedroom 203 Bedroom, French Doors 3/203. (STRATA 2017)



Figure 4.161. Bedroom 203 Door 3/203, silhouette of hardware and existing hardware. (STRATA 2017)



Figure 4.162. Bedroom 203, cast iron floor grille. (STRATA 2017)



Figure 4.163. Bedroom 203, wood box at northeast floor corner to provide headroom for stairs to first floor. (STRATA 2017)



Figure 4.164. Bedroom 203, speaking tube in south wall. (STRATA 2017)

Existing Conditions Interior – Third Floor

The third floor is approximately 949 gross square feet. The third floor consists of the center hall, one bedroom, one room that was used as the 'Museum' room by the Howes, and a third room that was likely a bedroom, later converted to a bathroom and dressing room.

This floor is original to the c. 1834 house. Early photographs before the ca. 1900 renovation, show there was a window on the south gable, which conflicts with the brick chimney in this location, so the exact layout on the third floor and the early chimney configuration is unknown. The dormers were added c. 1869 to the west and east sides of the gable roof. The roofline changed greatly with the ca. 1900 renovation, which included construction of the west cross gable and the north and south dormers. The bump-out at the south elevation includes both the second and third floor, adding usable square footage in the Room 301 area. This change accounts for the double chimney, now visible in Room 301. The southern-most chimney is from the ca. 1900 renovation, while the forward chimney is earlier. The ceilings are a combination of flat and sloped, depending upon their location.

The fire damage from a circa 1938 fire and another fire ca. 1960s can be seen throughout the roof framing and behind knee walls. After each fire, efforts were made to salvage the historic log rafters and re-frame the required areas. Again, during the 1976 NPS rehabilitation, the roof line was 'leveled', and yet another campaign of roof framing can be seen from that period. Documenting and comprehending the existing layers of roof framing could take a very long time, and likely to no avail. The framing has been so damaged and cobbled through the years, that the structural capacity of the roof system cannot fully be determined. This is further discussed in the Structural section of this report.

The ceiling finishes are missing from all spaces. The ceiling/rafters were found infilled with batt insulation during the June 2017 assessment site visit, and the insulation was removed prior to the August 2017 assessment visit, allowing for better viewing of the roof framing. It should be noted that the white roofing underlayment that is visible between the exposed roof skipped sheathing is an asbestos containing material that was installed by the NPS during the 1970s re-roofing project as a fire protection barrier.

Hall 300

Hall 300 is located in the east/central section of the third floor and is access by the stair from the second floor Hall 200 (Figures 4.165 - 4.170). The small Hall is approximately 30 square feet, measuring approximately 13'-8" (east/west) by 4'-0" (north/south). The floor slopes from the southwest corner towards the center of the house two to three inches. The stair is located at the east end of the hall. The ceiling height in this room is approximately 7'-7", but varies due to the roof slope above. The hall steps up to risers toward the west entry into Bedroom 303.

Trim in this room is stained and simple with bullseye corner blocks and plinths at the west and north doors and profiled baseboard. Trim at the south Door 1/301 is a later replacement with no

detailing. The north Door 1/304 has the only transom in the house and is not functional, as the operating hardware is missing. It almost appears like the transom and door surround were salvaged from another location and installed here as non-functioning. Picture molding lines the top of the walls near the ceiling, but it is intermittent. The floors of this room are narrow strip wood flooring with decorative parquet inlay, similar to the second floor.

All walls are lath and plaster over wood frame walls. The lath and plaster walls are in poor condition and are delaminated and cracked throughout. They are covered in wallpaper, which is concealing their condition and is in itself in poor condition.

The knee wall at the east wall above the stairs was re-framed during the 1976 rehabilitation. The original top wall logs can be seen below the frame wall. Cut nails in lath over the original logs can be seen in this location only. The presence of cut nails would indicate a potential early lath and plaster installation.

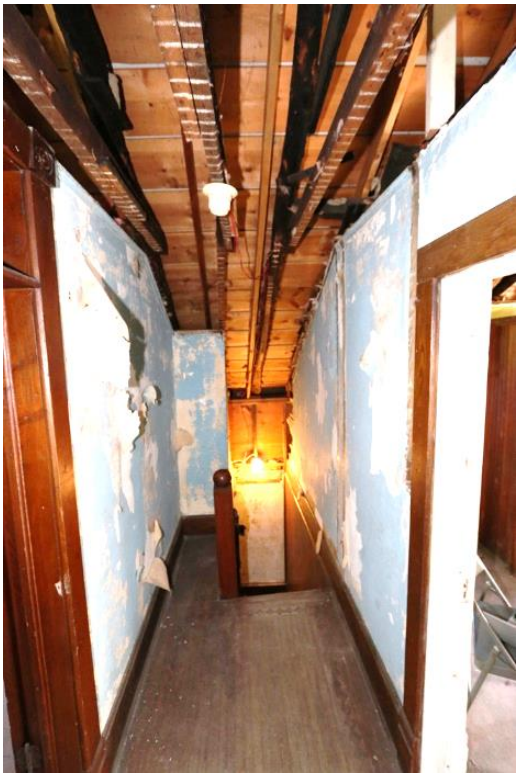


Figure 4.165. Hall 300, looking east.
(STRATA 2017)



Figure 4.166. Hall 300, Stair detail.
(STRATA 2017)



Figure 4.167. Hall 300, looking west. (STRATA 2017)



Figure 4.168. Hall 300, Parquet flooring detail. (STRATA 2017)



Figure 4.169. Hall 300, Detail of roof and ceiling framing. Note there are several campaigns of framing visible. (STRATA 2017)



Figure 4.170. Stair between Hall 200/Hall 300, east wall detail. The new frame knee wall was constructed by the NPS during the 1970s rehabilitation and rests on the top log wall. There is a chainsaw mark in the top of the log, likely from removal of deteriorated logs and/or structure above. A cut nail was found in the lath on this wall. (STRATA 2017)

Room 301/Bathroom 302

Room 301 and Bathroom 302 are located in the south/southeast corner of the third floor (Figures 4.171 - 4.181). These rooms are discussed together, as they function as a single space. Room 301 is approximately 143 square feet, measuring approximately 13'-0" (east/west) by 11'-9" (north/south). The adjacent bathroom is 67 square feet, although due to the sloping ceilings, a majority of this space is unusable. This portion of the room measures approximately 5'-7" (east/west) by 11'-9" (north/south). A portion of the bathroom where the toilet and sink were installed is raised above the surrounding finish floor by 10-inches. The ceiling height at the flat portion of the ceiling in Room 301 is 7'-8", while the knee wall at the west side of the room is 5'-2" high.

Two brick chimney masses are centered on the south wall, between pairs of windows. It is thought that the forward chimney pre-dates the ca. 1900 renovations and may be an early ca. 1834 chimney. There is a thimble from an old stovepipe into this chimney. Above the ceiling, the chimney is truncated and steps to connect its flue with the south chimney mass. This southern-most chimney was constructed on the exterior of the original south wall of the house and is incorporated into the second and third floor bump-out area.

Trim in in this room is painted and simply profiled with bullseye corner blocks and plinths at the doors and profiled baseboard. Trim at Door 1/301 from the hall is replacement trim, while the jambs may be early. The hinge pockets and door strike locations have all been painted, indicating there has not been a door installed into this room for a very long time. This makes sense, considering the bathtub is offered privacy with the beaded board wall surround.

Walls of Room 301 are a combination of lath and plaster (north and east walls) and a plaster board (west wall). The ceilings once were covered with lath and plaster, and later with a gypsum plaster board, like the west wall. This indicates that the plaster board that covers the west wall and once covered the ceiling, must have been installed after the 1960s fire, as the back side of the knee wall shows no signs of fire. Or, the plaster board was installed after a fire in this same location ca. 1938. Plaster board was available and used during both time periods. Regardless, the top coating on this plaster board material tested positive for asbestos, which is not unusual for the time in which it was installed. Due to the positive outcome, other areas throughout this space should be tested as well.

The south wall was constructed as part of the c. 1900 renovations. This is a double-thick wall, framed to achieve the rounded jambs at the windows. The lath and plaster walls are in poor condition and are delaminating and cracked throughout. They are covered in wallpaper which is concealing their condition and is in poor condition itself.

There is a hole in the west knee wall, looking into the inaccessible space west of the wall. This area is heavily fire damaged. The original wood flooring from Room 301 is visible in this area, as is the original top log for the west exterior wall. Lath and plaster from previous closets is visible as well.

Within Room 301, three pole rafters and a truncated dormer rafter on the east slope remain from the historic roof framing. Two pole rafters remain on the west slope.

The floors of this room are wood flooring covered with linoleum. The linoleum and mastic tested negative for asbestos, so it can be removed. The flooring is patched where the bump-out occurs in the south portion of the room.

Two pairs of 4/4 double-hung windows are located in the south wall (Windows 307/308 and 309/310). The eastern pair is divided by a wall, but this is not visible from the exterior. These windows are covered with interior storm windows and date to the ca. 1900 renovation. These window sashes operate with cotton ropes and pulleys and are in poor condition.

A thin beaded board privacy wall is constructed around the cast iron bath tub. There are several boards missing. The door, which swung into the bathing space, is missing. The tub is currently upside down.

Vent piping adjacent to the chimney is cut off and is no longer functioning.

The Bathroom 302 area is raised above the adjacent room where the space is in line with the dormer window. The five-paneled Door 2/301 into this room appears to be original to the ca. 1900 renovation, as it matches other doors. The dormer Window 306 offers headroom in this area, while the southern portion of this space is virtually unusable, due to the sloping ceiling. A sink was installed on the north wall, and a toilet was installed along the east wall. A gravity air vent is installed through the floor between this room and Bedroom 201 below. The only separation is a screen, offering no privacy. The soil stack is exposed along the floor to the east side of the room, until is turns down into the southeast corner of Bedroom 201 below. The north and west walls are lath and plaster. These walls should be further tested for asbestos to be certain the top finish layer is clear.



Figure 4.171. Room 301, Looking south. (STRATA 2017)

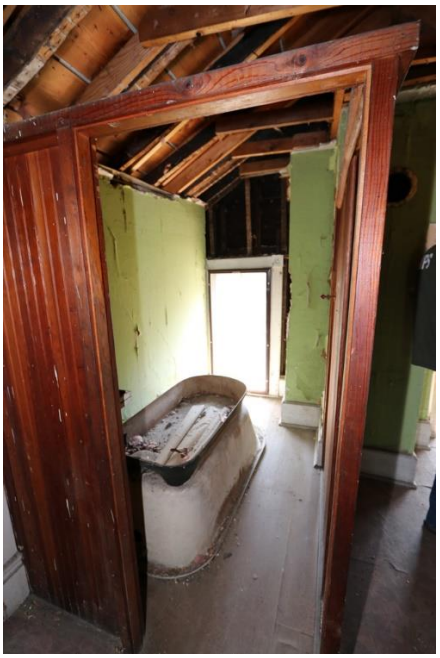


Figure 4.172. Room 301, Looking south into bathing room. (STRATA 2017)



Figure 4.173. Room 301, Looking west. Note this knee wall was constructed after the last of the fires, as the wall studs on the back side are not burned, and everything behind the wall is burned. (STRATA 2017)



Figure 4.174. Room 301, Looking north. (STRATA 2017)



Figure 4.175. Room 301, Looking east. (STRATA 2017)

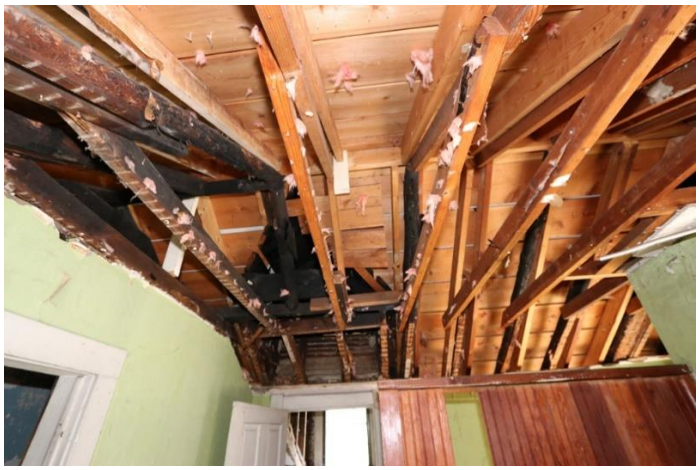


Figure 4.176. Room 301, Looking east up at roof framing. (STRATA 2017)



Figure 4.177. Room 301, Looking south up at roof framing. (STRATA 2017)



Figure 4.178. Room 301, Looking west inside hole through knee wall. Note the amount of fire damage remaining in this area. The red arrow is pointing to the top log of the west log exterior wall. This space was once incorporated into Room 301, but was separated with the knee wall after the fire. (STRATA 2017)



Figure 4.179. Room 302, Looking east at Window 306. (STRATA 2017)



Figure 4.180. Room 301, Looking west inside hole through knee wall. (STRATA 2017)



Figure 4.181. Room 302, Looking south at Window 307. (STRATA 2017)

Bedroom 303

Bedroom 303 is located in the western portion of the third floor, constructed over the west porch (Figures 4.182 - 4.188). The function of this room has been debated, as there is not and has never been a door installed. This space was reportedly used as the 'Museum Room' by the Howes, as a space to display their travel mementos and important objects. This room is approximately 160 square feet, measuring approximately 10'-11" (east/west) by 18'-10" (north/south, dormer to dormer).

Trim in this room is stained and simply profiled with bullseye corner blocks and plinths at the doors and profiled baseboard. Trim remains at the entry door and at portions of the windows. A majority of the baseboard is missing. Walls were originally lath and plaster throughout, although most of the material is missing. The ceilings once were covered with lath and plaster, which is also missing in its entirety.

Two layers of wood flooring are evident in this room. The upper decorative parquet wood flooring with an intricate border design has been mostly removed from the room, likely due to previous fire damage. The western section of floor is tongue and groove flooring, which was installed as part of the 1976 rehabilitation project.

A pair of 4/4 double-hung Windows 312/313 are located in the west wall. These windows are covered with interior storm windows and date to the ca. 1900 renovation. The window sashes are in poor condition, and the exterior sill is deteriorated. Single 4-lite windows are installed in the dormers (Windows 311 and 301).

Niches in the wall on either side of the window and on the north and south knee walls may have originally held built-in shelving. Flooring of the two c. 1869 west dormers is visible just below the baseboard along the north and south walls. These dormers were removed when the cross gable was constructed c. 1900. This room has no closets.

A cast iron gravity floor grate is installed in the east section of flooring. This is not ducted, but can be opened to receive warm air from below for rising heat. In addition, there may have been a stovepipe extended into this space from the chimney mass in the adjacent Bedroom 304 closet space to the north. There appears to have been a stovepipe connection in this closet, and there is a hole in the knee wall dividing these spaces where a pipe may have previously been installed.



Figure 4.182. Bedroom 303, looking east. (STRATA 2017)



Figure 4.183. Bedroom 303, looking south. (STRATA 2017)



Figure 4.184. Bedroom 303, looking west. (STRATA 2017)



Figure 4.185. Bedroom 303, looking north. (STRATA 2017)



Figure 4.186. Bedroom 303, ceiling detail. (STRATA 2017)



Figure 4.187. Bedroom 303, Grille in floor. (STRATA 2017)



Figure 4.188. Bedroom 303, Flooring detail. (STRATA 2017)

Bedroom 304 and Closet 304A

Bedroom 304 is located in the northern portion of the third floor (Figures 4.189 - 4.196). This room is approximately 160 square feet, measuring approximately 13'-8" (east/west) by 13'-9" (north/south). The ceiling height at the flat portion of the ceiling is 7'-1". The west closet is approximately 23 square feet and has a sloping ceiling with very little head room.

All interior walls are 2x4 wood frame, except for the north wall which is two layers of studs to create an extra thick wall for the exterior shingled curved jambs at the windows. The top of the exterior north log wall can be seen at the north wall, approximately four inches above the third finish floor. The log was cut in the ca. 1900 renovation when the brick corner chimney was added.

Trim in in this room is stained and simply profiled with bullseye corner blocks and plinths at the doors and profiled baseboard. Trim remains at the doors and at the windows. A small section of the baseboard is missing in the southeast corner of the room. Walls are lath and plaster throughout, although the wall finishes are missing from the north wall. The ceilings once were covered with lath and plaster, which is also missing in its entirety, exposing the ceiling and roof framing members. The remaining lath and plaster are in very poor condition, with multiple layers of wallpaper, cracking, and plaster loss.

A layer of wood-grained linoleum flooring is installed throughout the room with the underlying wood tongue and groove flooring remaining. The condition of the underlying wood floor is unknown, but it is visible in the adjacent closets 304A and 305.

A three-part window is centered in the north wall (Windows 302, 303, 304). The center window is 6/6 and is flanked with arched 1/1 windows. All openings are covered with interior storm windows. These windows date to the ca. 1900 renovation. The window sashes are in poor condition, and the exterior sill is deteriorated. The three doors in the room date to the ca. 1900 renovation. The Door 1/301 transom is discussed in this section with Hall 300. This door has

been retrofitted at the top to accommodate sloping floors, with additional wood to fill the gap. The door hardware is missing. Door 2/304 into Closet 305 is coming apart at the mortise joints and requires restoration. It is also missing hardware. Door opening 3/304 into Closet 304A is missing its door and corner block.

A cast iron gravity floor grate is installed in the southeast section of flooring. This is ducted through the visible ductwork in the Hall 200 below. In addition, there may have been a stovepipe extended into this space from the chimney mass in the Closet 304A. There is a round patch from a thimble through the middle of the north section of the west wall. The patch is visible on both sides of the frame wall. An infilled stovepipe opening in the chimney mass in Closet 304A confirms a previous installation. Remnants of an old fire alarm system are seen on the east wall.

The ca. 1976 knee wall is visible within Closet 304A. This knee wall is constructed atop the original 1834 exterior west log wall, which is partially visible above the baseboard. The top log was cut when the ca. 1900 brick chimney was constructed.

Lath and plaster walls in this room are in deteriorated condition. The ceiling finishes have been removed. The brick masonry diagonal chimney mass extends through the northwest corner of this space. Plaster is directly applied to the surface of the brick. The wood tongue and groove flooring in this area is visible and in fair condition.



Figure 4.189. Bedroom 304, Looking south. (STRATA 2017)



Figure 4.190. Bedroom 304, Looking west. (STRATA 2017)



Figure 4.191. Bedroom 304, Looking north. (Sheals 2017)



Figure 4.192. Bedroom 304, Looking south. (STRATA 2017)



Figure 4.193. Bedroom 304, Looking at ceiling and roof framing. Note that some of the historic pole rafters are still in place but are supplemented with or replaced additional roof framing members. (STRATA 2017)



Figure 4.194. Bedroom 304, Detail of cast iron floor register in southeast corner of the room. (STRATA 2017)



Figure 4.195. Closet 304A, Looking north toward chimney mass. (STRATA 2017)



Figure 4.196. Closet 304A, Looking west. (STRATA 2017)

Closet 305

The west Closet 305 is 79 square feet and also has a sloping ceiling with very little head room, except for at the dormer Window 305. The lath and plaster walls remain along the west wall, and they are papered and in poor condition. The lath and plaster are removed from the other walls and a majority of the ceiling. The 2x6 knee wall constructed ca. 1976, runs along the entire east wall. Below this wall, the top of the east exterior log wall is visible.

The ca. 1889 dormer and Window 305 remains intact. The window requires restoration. The interior of the window sash and remnant sill has had animals chewing on it, and the interior sill is missing. The tongue and groove wood flooring is visible throughout the closet and is in good condition.



Figure 4.197. Closet 305, Looking north. (STRATA 2017)



Figure 4.198. Closet 305, Looking east at Window 305. (STRATA 2017)



Figure 4.199. Closet 305, Looking north. (STRATA 2017)

Existing Conditions (Summer 2017):

Exterior

- Overall spot repointing required for the exterior masonry. Some cracks forming to be monitored. There are many campaigns of mortar repointing, which are inconsistent in color and hardness.
- Rusticated cast concrete block deterioration is prevalent at the walls of the east porch, with some deterioration at the Conservatory walls.
- Brick chimneys have loose flashing and deteriorated mortar
- NW chimney does not have a cap.
- The roof is in fair condition, with some broken or missing shingles. The roof underlayment contains asbestos.
- The lightning protection system may not be connected to operate correctly.
- Stone is dirty.
- Wood windows and doors require some restoration work. Windows need to be closed.
- Second floor east porch railing is dangerous.
- Interior storm windows are partially missing.
- Sealants needed at Conservatory.
- Exterior steps have no handrails.
- Exterior trim and siding partially dates to the 1976 rehabilitation. There are sections that require replacement due to deterioration, woodpecker, or insect damage.
- The house has no water, gas, or sanitary services. Electrical availability is very limited.
- Wasps were forming nests in the spaces between exterior and interior storm windows.
- The structure is leaning to the south and requires monitoring.

Interior

- The second floor structural framing does not have adequate load carrying capacity for occupancy of any kind.
- The stair to the second floor is supported by a post that is split and they are not properly supported.
- Roof framing is deteriorated and has been supplemented with unconventional framing.
- All existing historical artifacts and architectural components that are stored may be subject to deterioration, damage, or theft.
- All mechanical and electrical systems require inspection and repairs.
- The interior historic finishes include: lath and plaster walls, trim, fireplace surrounds, wood paneling, and wood flooring. Almost all plaster is in poor condition. Wallpaper and paint is peeling throughout the interior on all surfaces.
- Lead based paint was found on some interior and exterior surfaces.
- Several interior finishes and materials tested positive for asbestos. Further testing is required to ensure no other patches in the house contain asbestos.

Building Code, Life Safety, and ADA Existing Conditions

The Main House HS-18 is currently unoccupied.

Former Use – 'R3' (Residence) or B (Museum)
Type VB Construction, Un-sprinklered

Gross Square Footage

Basement	1,297 sf
First Floor	823 sf
Second Floor	798 sf
Third Floor	941 sf
Total	3,859 sf

Occupant load for the building, per IBC –

Basement Accessory Spaces	1297 sf / 300 sf	= 4 persons
First Floor	823 sf / 200 sf	= 4 persons
Second Floor	800 sf / 200 sf	= 4 persons
Third Floor	941 sf / 200 sf	= 4 persons

Single Exit Building – Section 1021.2, Exception 6, allowed for R3 occupancy.

There is currently no audible smoke or fire alarm, nor are there exit signs or emergency lighting.

The building is not ADA accessible. There is no accessible route to or entry into the building. There is no accessible route on the interior due to multiple floor levels.

Conclusion

The Main House HS-18 requires immediate stabilization and shoring, as noted in the structural section of the report. This is further addressed in Chapter 6. The building is in fair to poor condition and is not occupiable in its current condition. The building requires immediate and long term maintenance typical for a log frame building. In order for the building to be used, the building must be stabilized and repaired, the interior must be abated of LBP and ACM, the interior completely rehabilitated, and new utilities brought to the building. The building is also not ADA accessible in its current form, and with the multiple levels it will present a challenge.

Main House (HS-18) Existing Conditions – Structural

The Main House of the Bailly Homestead (Figure 4.200) is a three-story log house with painted clapboard siding, a full basement, and double level porches in both the front (west) and back of the house. Reportedly built around 1834, the house retains the original log structure beneath the siding and features several additions and modifications from various building periods. It has a gable and valley roof with the main ridge running north-south, dormer windows, and two brick chimneys. The interior floor framing is a combination of dimensional lumber and hand-hewn beams, and all interior walls appear to be originally non-structural. There are also some more modern materials present, such as steel beams and posts, metal decking, and a newer roof constructed over the original roof framing. This structural assessment was performed in June and August of 2017. Structural Calculations can be found in Appendix E. Wood specimen identification discussed in this section are based on the wood identification report found in Appendix F.



Figure 4.200. Main House, looking northeast. (SEA 2017)

Foundation

Log structures often were constructed with dirt floors or a crawl space. Reportedly, this house was lifted in the late 19th or early 20th century in order to build a full walk-in basement. The footprint of the basement is the same as the house, including the porches, with the exception of the conservatory on the south side of the house, which has a crawl space. The exterior foundation walls for the most part are stone, with some brick, cast concrete block, and CMU supporting portions of the east porch. The interior structural basement walls are double-wythe

brick. The interior brick basement walls support the east and west exterior log walls. There is also a combination stone and brick wall supporting the center portion of the west porch. The basement floor is concrete of unknown thickness.

Stone Masonry

The exterior stone masonry foundation wall measures 16 ½-inches thick at the walk-up entrance on the north side. The height measures 7-feet 6-inches from the top of the concrete basement slab to the top of the stone on the inside of the wall. Above this, the interior wythe of the wall transitions to brick for pocketing of the first floor joists and the exterior wythe remains stone masonry. The log walls bear on the masonry at the approximate height of the first floor flooring and the bottom of the exterior siding. A steel plate is visible where the log walls bear on the masonry at the north elevation. No measurements could be made for any footings below the exterior stone masonry foundation walls, as no excavations were performed.

Grade slopes from west to east; the basement walls on the west extend approximately 6-feet below existing grade (Figure 4.201). At the east porch, the walls extend less than 2-feet below existing grade. The east porch projects out beyond the roofline and here the basement slab steps up to allow for two walk-out entryways.



Figure 4.201. North elevation, looking south. (SEA 2017)

The condition of the stone masonry foundation walls varies throughout the basement. On the west walls, where the retained height of soil is the greatest, there is streaking and staining from water infiltration. The leaks are active as evidenced by the presence of moisture on the interior. Most of the moisture and staining observed on the walls occurs at or below the basement windows in the eastern rooms. This indicates that the moisture migrates through open mortar joints in the wall and through gaps in the window framing.

In some places the basement walls are not readily visible due to the presence of plaster and lath finish. In general, where the walls are visible, water staining is present to the approximate height of exterior grade. Areas of foundation walls below basement windows are especially affected by mortar wash out (Figure 4.202).



Figure 4.202. Room 003, looking north. (SEA 2017)

From the exterior, cracks and open joints are visible in the stone masonry

Brick Masonry

The interior brick walls are affected by moisture infiltration to some extent. Where the brick intersects with the north exterior stone wall, moisture is present. There are also signs of limited brick movement in this location. The cause of brick movement here is undetermined at this time.

Stone footings exist for the interior brick walls, as they are slightly exposed above the concrete slab.

The Door 4/001 opening through the brick wall into the northwest Room 003 has a wood lintel. The Door 1/00s into the southwest Room 002 does not have a lintel. Here, the bricks over the doorway are supported by the door frame (Figure 4.203). Brick movement is visible at this location consistent with the lack of adequate lintel support.



Figure 4.203. Door 1/002 into Room 002. (SEA 2017)

The brick wall supporting the east log wall is plastered over or otherwise covered in many places. The visible portions of this wall do not indicate any signs of distress.

The base of the brick chimney at the northwest corner of the house extends into the basement and appears to extend beneath the concrete floor slab. The chimney is triangular in shape and features a fireplace at the basement level. Some moisture was observed in the fireplace. Here the steel lintel has corroded significantly to cause fracturing of the adjacent bricks on one side and separating of the bricks on the other side (Figure 4.204).



Figure 4.204. Northwest chimney fireplace in basement. (SEA 2017)

The base of the brick chimney on the south side of the house also extends into the basement. The stone footing for the chimney is visible where the concrete basement floor has been poured around it. The chimney is rectangular in shape and features a fireplace hearth at the basement level. Above grade, the chimney projects out from the south side of the house, beyond the line of the stone masonry foundation wall. The type and condition of the foundation below that portion of the chimney is unknown.

Rusticated Cast Concrete Blocks and Concrete Masonry Unite (CMU)

The basement extends under the projection on the east porch (Room 006). This is where the basement floor steps up and walk out doors are located on the north and south walls. In the northeast corner of this vestibule, there is a crack in the basement slab. The rotation of the slab indicates settlement in that corner (Figure 4.205). In addition, the cast concrete block wall in that corner has several open bed joints that correspond with the movement of the slab. The joints have opened wide enough that daylight is visible through them.



Figure 4.205. Floor in Room 006. (SEA 2017)

There is an infill CMU wall beneath the east porch steps. It appears that this wall has moved since it was originally constructed. The cause for movement is undetermined at this time.

Steel Framing

The Main House has had repair and remodeling work performed using steel framing. Two of the projects that were performed for the house using steel were documented in the 1975 drawings that were provided for this study. These projects are the construction of the east porch and the addition of three steel beams under the first floor joists. A third project shoring the second floor framing on the south half of the house in the 1960's, prior to NPS ownership, is not documented.

For the construction of the east porch, three steel posts, 4-inches in diameter with ⅜-inch thick by 8-inch square base plates were installed adjacent to the east brick basement wall, in Room 005. Above the posts there is an 8-inch tall wide flange steel beam spanning the length of the house (Figure 4.206). The bearing condition for this beam at either end is unknown. The beam may be bearing on the exterior stone masonry foundation walls or on other supports obscured by the plaster and lath walls. The foundations for the steel posts are also unknown at this time.



Figure 4.206. Porch support framing, Room 005. (SEA 2017)

The other documented project for the basement is the additional steel beams below the first floor, in Room 001 (Figure 4.207). The beams appear to have been installed with some differences from the plans. The beam sizes are not consistent with the drawings, which indicate three W8x17 beams. Based on measurements of beam depth, width, and flange thickness, the center beam is likely a W8x15 and the two other beams are W6x15. The posts for the center beam have concrete footings that contrast in color against the rest of the concrete basement slab. This is consistent with new footings as shown on the drawings.



Figure 4.207. Steel support beams, Room 001. (SEA 2017)

While the center beam is supported at both ends and near midspan with steel jack posts, the other two beams are pocketed into the brick walls at the ends. These beams also have jack posts installed near the midspan. The posts for the center and south beams are hidden inside the gypsum board walls of the interior mechanical room, Room 004.

The center beam bisects the basement, spanning from east to west. The beams on either side are spaced just over 2-feet away from the center beam. While labeled a “leveling” beam on the Project No. 6300-0988 As Constructed Drawings, the north beam is contributing to the structural integrity of the house, as it is directly under the interior wall of the first level.

Two additional jack posts are also located in the basement, in front of the south chimney base. These posts appear to be part of a shoring system for the second floor framing, but no associated drawings were provided as part of this project. Two boards span between the posts, one beneath the posts, on the basement slab, and one above the posts, at the ceiling (Figure 4.208).

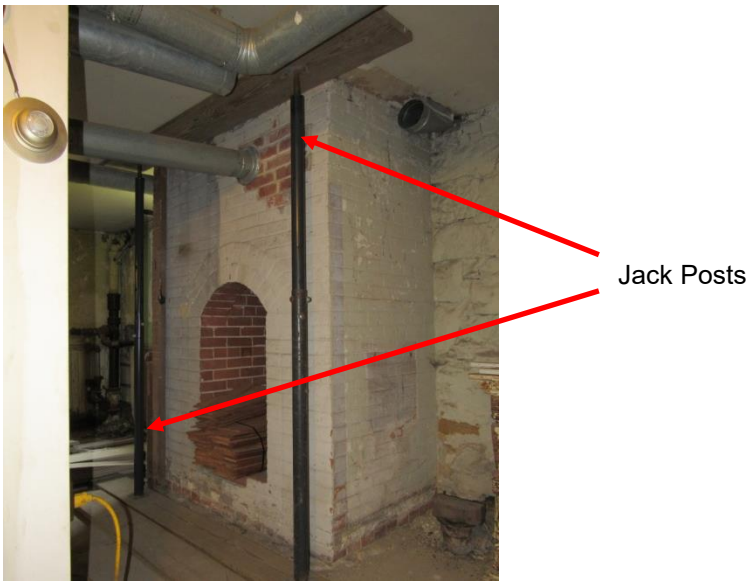


Figure 4.208. South chimney, Room 001. (SEA 2017)

On the first level, there is another jack post located in front of the fireplace. It is not directly located above the jack posts in the basement. The first level jack post bears on a board on the flooring and supports a steel beam overhead (Figure 4.209).



Figure 4.209. Support Framing in Room 101. (SEA 2017)

The supported steel beam is one of two steel overhead beams in Room 101 that are encased in thin wood paneling. Based on measurements of beam depth and flange width and thickness, the beams are likely W8x15. The beams are located on either side of the fireplace and span north south. At the south wall, wood posts support the steel and bear directly on the flooring. At

the north wall, the beams terminate. Through an opening on the opposite side of the wall a wood post supporting one of the beams was observed.

An opening in the ceiling provides some visibility to the top flange of the beam that is supported with the jack post. It appears that the steel beam is not in contact with any of the visible second floor framing members. The wooden post supporting the beam at the south wall has punched through some of the wood flooring. This is likely the reason that the steel beam does not contact the framing and also the reason for the jack post to be installed. In addition, the south wood posts have been notched to avoid architectural features around the mantle and have diminished section (Figure 4.210).



Figure 4.210. Notch in post, east of fireplace (SEA 2017)

It should be noted that while the wall between Room 101 and Room 102 is not considered to be structural, the posts supporting these beams are structural and are located inside this non-structural wall. It should also be noted that the north “leveling” beam in the basement is directly under this wall and contributes to the structural support of the overhead steel framing on the first level.

First Floor Framing

The joists supporting the first floor are 2-inch by 8-inch (actual dimensions) white pine spaced at 16-inches on center, oriented north/south. They are continuous members from one end of the house to the other, approximately 27-feet long. The joists were observed at several locations in the basement where the gypsum board ceiling had been removed. The bearing condition of the joists was observed at a location on the north wall. The joists bear directly on the stone masonry foundation wall and brick is coursed in between the joists. Where observed, the joists and bearing conditions did not indicate evidence of rot or insect damage.

From an opening in the gypsum board, cross bridging could be seen in at least 4 locations along the length of the joists.

The first floor joist framing is supported at midspan by steel framing, as discussed previously.

A cross section of the subflooring and flooring is visible at the stairs. The subfloor is ⅞-inch thick boards and the flooring is ⅜-inch tongue and groove.

Rooms 002 and 003 are located below the west porch. The framing for the porch is visible in these rooms and measured to be untreated 2-inch by 10-inch joists spaced at 12-inches on center. Joists run north/south and bear on sill plates at the exterior walls and the center wall dividing the two rooms. The joists have markings reading “Kiln Dried Fir & Larch”. There are some signs of moisture staining on the joists but overall there is no indication of rot or deterioration (Figure 4.211). Three-quarter-inch tongue and groove decking for the west porch is attached to one-half-inch shim strips on top of the joists.



Figure 4.211. Looking up at porch framing, Room 003 (SEA 2017)

Rooms 005 and 006 are located below the east porch. The porch floor framing consists of metal decking supporting the concrete porch. The decking size was measured to be consistent with the size and type specified on the project drawings from the 1970s.

At the east wall of Room 006, there is corrosion where the metal decking meets the wall. While there is settlement of the foundation in this area as previously discussed, the cause of corrosion at this location cannot be determined at this time (Figure 4.212).



Figure 4.212. Corrosion on steel decking, Room 006 (SEA 2017)

Second Floor Framing

The hand-hewn beams exposed in the dining room (Room 104) are the structural framing members for the second floor (Figure 4.213). The three beams are evenly spaced and span the entire room from east to west, approximately 21-feet 6-inches. The beams vary in size along their length. The northernmost hewn beam was measured 5-inches wide and 4 ¾-inches tall at one location. It frames into some additional framing around the stairs, rather than spanning the entire room. This is discussed in further detail in the “Interior Stairs” section of this report.



Figure 4.213. Room 104, looking west. (SEA 2017)

The beams exhibit some signs of deterioration or damage. Two of the beams appear to have longitudinal checks or splits in places. These are also accompanied by a yellowish substance and signs of moisture staining (Figure 4.214).



Figure 4.214. Beam at stairs of Room 104, looking northeast. (SEA 2017)

The floor in Room 203 (above Room 104) sags noticeably. An effort was made to record the extent of deflection in the beams. Since the beams are hand hewn and the member size varies along the length, an accurate deflection is difficult to measure. Through the use of a string line and level, the ceiling and beams in Room 104 were found to be deflecting as well as out of level. Depending on the location, the ceiling drops by as much as 1 ½-inch from west to east. The greatest deflection is likely further east in the room, near the stair framing.

The second floor framing in Room 101 is not exposed as in Room 104 as it is covered by plaster and lath. At a hole in the ceiling near the fireplace, limited observations of the framing can be made. A hewn log is visible measuring 7 ½-inches by 5-inches running east to west. There are also 2-inch by 7 ⅞-inch joists running east to west at 16-inches on center. The support condition for the joists could not be observed.

The original wood flooring is visible from beneath at this hole as well. Interestingly, the flooring that is seen in Room 202, directly above this, is parallel to the joists. The nailing pattern of the flooring is also unevenly spaced. This may indicate that shim boards were used over the original flooring in order to level the floor in Room 202.

Bump-outs

On the south side of the house, Rooms 201 and 202 have “bump-outs” (constructed ca. 1900) that extend beyond the footprint of the original house. These areas extend from just above the floor on the second level to the roofline. In Room 201, a portion of the support framing was

visible. Triangular frames are supporting the vertical load for the “bump-out”. The wall framing and tie in to the house is not exposed. The framing for the small portion of third floor that is part of the “bump-out” also was not exposed.

Upper Balconies

The west balcony, or porch, at the second floor is centered on the first floor porch and extends over the front entrance of the house. It is supported by the log wall of the house and the two of the four columns that also support the roof. Based on the orientation of the beadboard soffit and tongue and groove flooring, the balcony framing appears to run north-south. No observations could be made for the condition of the framing members (Figure 4.215).



Figure 4.215. Upper balcony, west elevation. (SEA 2017)

The east balcony is very similar to the west balcony, except that it is wider. There are six columns that support the roof over the east porch, and the balcony is supported by four of the six columns (Figure 4.216). The railing on the east balcony is severely deteriorated and is unsafe.



Figure 4.216. Upper balcony, east elevation. (SEA 2017)

Interior Stairs

The wood stairs leading from the basement to the first floor and the stairs from the first to the second floor present structural concerns due to the configuration of framing and supports around the stair openings. Overall, there is a no clear or direct load path for the second floor framing or the stairs in this corner of the house. This results in non-structural components taking loads and excessive deflection of the floors.

The stairs up to the second floor have two quarter landings along the ascent. The upper landing is at the northeast corner of the house. The upper sections of the stairs are directly over the stairs to the basement. There is no post to support the second quarter landing, giving a “floating” effect (Figure 4.217). The framing for the landing is not exposed; support for the landing is from either the exterior walls or the stair stringers. The stringers are likely supporting the stairs and are subject to high moment loading, especially at the connections to the landing. The floating effect has likely caused undue stresses and loads in the stringers to transfer into the walls and door jamb of a small closet below the stairs.

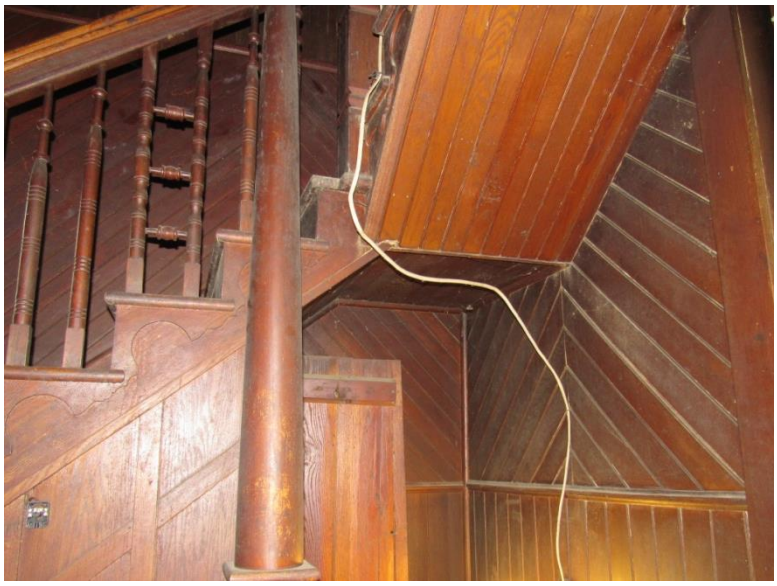


Figure 4.217. Quarter landing for stairs to second floor. (SEA 2017)

The second floor framing at the floor opening for the stairs is composed of 2-inch by 6 ⅝-inch wood joists. One member frames into the northernmost hewn beam, and the same hewn beam frames into another one of these members. A third member also frames between the two joists. A post supports these members at the reentrant corner of the floor opening (Figure 4.218).



Figure 4.218. Framing around stairs, Room 104. (SEA 2017)

The capital of the support post is a thin square wooden plate. The beam and joists above only have partial bearing on the plate. The northern hewn beam in Room 104 has a scarf joint at the opening for the stairs. This joint has some displacement, the cause of which is unknown. The

most visible indication of structural problems is at the base of the post as seen from the stairs to the basement. The post, which is supporting the end of a long, hewn beam and the other framing members around the floor opening, bears on a section of flooring and subflooring over the basement stairs. There is no vertical support directly below the post and the flooring. The floor here is visibly out of level (Figure 4.219). Measurements taken at this location show 2-inches of drop over 2-feet 4-inches (Figure 4.220).



Figure 4.219. Condition at basement stairs. (SEA 2017)



Figure 4.220. Level measurements at basement stairs. (SEA 2017)

The slope on the flooring here was measured to be approximately 2-inches over 2-feet 4-inches. The flooring is supported on one side by the foundation wall and on the other side by a 4-inch by 4-inch chamfered post to the basement slab. The post takes a majority of the load from the post above, as well as much of the load from the stairs to the basement. In addition, load is likely transferred from the second floor stairs to this post. It has been loaded to the point of splitting along its length (Figure 4.221). At the basement slab, the post is deteriorated due to rot and is marked by pinholes from wood boring insects.

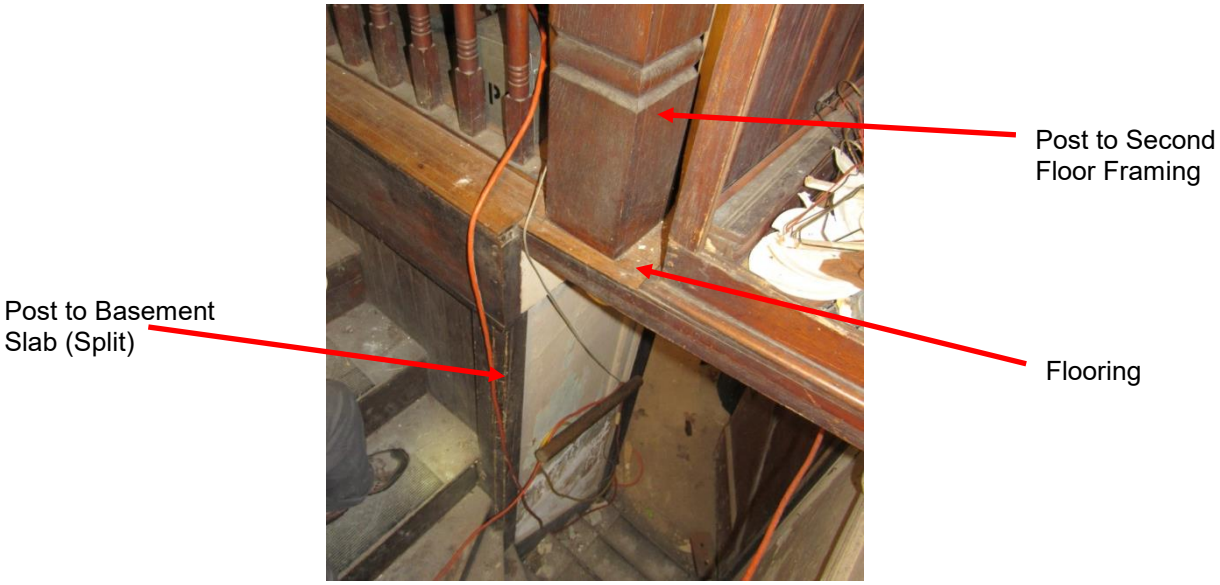


Figure 4.221. Framing around stairs, Room 104. (SEA 2017)

Third Floor Framing

The framing for the third floor is exposed in Room 201. Four hewn beams spaced just over 3-feet apart span from east to west. This is consistent with the second floor framing. The size of each varies from 3 ½-inches wide and 5 ½-inches tall to 3 ½-inches wide and 7-inches tall. In the adjacent Room 202, the overhead framing is hidden by a plaster ceiling, but the same beams are assumed to be continuous into this room. The wall dividing the two rooms is very thin and, while it may be receiving some loads, likely does not provide substantial support for the hewn beams.

Where one of the beams is pocketed into the exterior log wall in Room 201, the hewn beam has rot due to moisture (Figure 4.222). It is unknown if the rot is active or inactive at this time. This should be closely monitored.



Figure 4.222. Beam in Room 201, looking northeast. (SEA 2017)

Both the floor and the ceiling in Room 201 are sloped toward the center of the house. They are sloped in the north south direction as well as the east west direction. The slope is excessive.

The subfloor boards above the beams in Room 201 are ¾-inch thick and vary in size from 10 to 12 ½-inches. The cross section of the flooring is visible at an existing pipe penetration. There is a ¾-inch gap between the subfloor and the 1-inch thick flooring. This may indicate the use of shims to provide a more level floor above.

In Rooms 200 and 203, the third floor framing is hidden by plaster and lath ceiling. Holes in the plaster have exposed the framing. Framing members for the third floor as seen in these rooms are similar to that in Room 201; large hewn beams spaced at approximately 3-feet on center. Additionally, 2-inch by 4-inch net dimensioned members spaced at 18 to 19-inches on center have been added to the framing. The overall thickness of the third floor, from bottom of plaster to top of flooring, measures 10 ⅜-inches at the stairs.

At a hole in the ceiling in Room 200, the connection of the third floor framing into the east exterior log wall is exposed. There is significant wood rot on the hewn beam here. The other 2-inch wide members can also be seen. Some of them are toe nailed into the log wall; others have no connection to the wall (Figures 4.223 and 4.224).



Figure 4.223. Ceiling in Room 200, looking northeast. (SEA 2017)

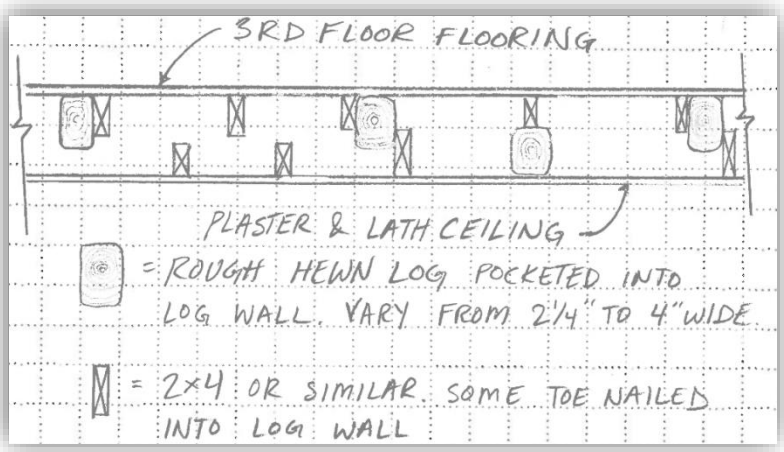


Figure 4.224. Section of floor as observed in Room 305.

The same area is also somewhat visible from above, in Room 305. Here the spacing and location of the 2-inch by 4-inch (or similar) members indicates their purpose. Some of the members are providing a level surface for the flooring for the third floor. Other members are providing a level surface for the plaster and lath ceiling of the second floor. These members do not contribute to the structural capacity of the framing but do add weight on the beams. The positions of the members above or below the beams increase the overall thickness of the floor.

The wall running north south between Rooms 200 and 203 is very thin and does not provide structural support for the third floor framing, but it is likely taking incidental loading from above.

Above West Porch

The area of third floor that projects out over the west porch is framed differently than inside of the log walls. The framing system is visible in places in Room 303. Joists measuring 2-inch by 7 ½-inch spaced at 16-inches on center span east west. Beyond the north and south stud walls in Room 303, the joists are supplemented by 1 ½-inch by 7 ⅛-inch joists at 16-inches on center. A grademark visible on one joist shows southern pine, graded No. 1, kiln dried.

Roof Framing

The main ridge of the gable and valley roof runs north-south. A west facing gable with dormers extends over the west porch. There are also two dormers on the east side of main roof (Figure 4.225). At the base of the east dormers the roof transitions to a gentler slope over the east porch.

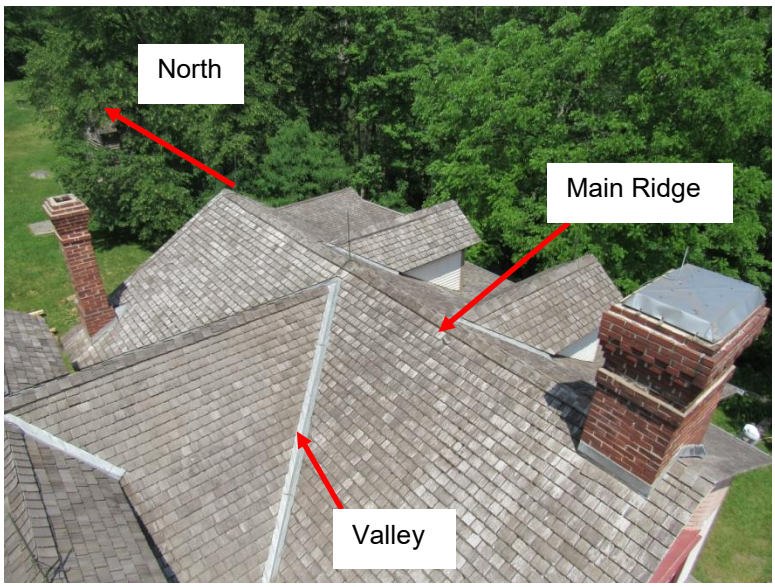


Figure 4.225. View of roof, looking northeast. (SEA 2017)

The roof does not show signs of external distress; the ridgelines are straight and there is no apparent sagging.

The roof framing is exposed on the third floor. Plaster and lath or other wall coverings, and insulation have been removed.

Clearly, the roof has been damaged by two separate fires and has since been reconstructed. Some burned members have been left in place, and the newer roof has been built over the top of these members. The depth of fire damage on these members as seen in Room 303 was 1/32nd to 1/16th-inch. Some other members, especially toward the southwest corner of the house are more severely damaged. Some of the earlier framing, including fire damaged framing, is incorporated into the newer roof. There are also older 2-inch by 4-inch members that were used

for supporting plaster and lath walls and ceilings in the main gable. It is difficult to distinguish what is and what is not contributing to the structural integrity of the roof (Figure 4.226).



Figure 4.226. Roof framing in Room 301. (SEA 2017)

Main Gable

The ca. 1834 roof appears to have been constructed of log pole rafters. A later renovation, likely ca. 1900 utilized 2-inch net dimensional lumber. The dimensional lumber has been identified as pine, likely red pine. The newer (1960s and 1970s) roof framing is primarily 2-inch by 6-inch (nominal) pine, likely western yellow pine. Rafters are spaced approximately 12 to 18-inches on center. It is difficult to determine the date of all roof framing members.

The log walls of the house top out at or just above the level of the third floor framing. Newer knee walls have been constructed on top of the east and west log walls. Old and newer rafters and logs are connected to the knee walls (Figure 4.227).



Figure 4.227. Roof framing in Room 302. (SEA 2017)

At the apex, the ridge beam of the newer roof has been installed above the older ridge. Neither of these ridge beams are true ridge beams, however, as the older one is discontinuous in several places and the newer one is not vertically supported at the south end. Some of the older rafters appear to be connected to the newer ridge beam and newer rafters. The newer ridge beam appears to be set level, while the older beam is severely sagging in the center. The two beams are far apart in the center, but nearly in line at the ends.

The valley beams in Rooms 301 and 304 (and 304A) are part of the older roof that has been incorporated into the newer roof. Each beam is made up of two 2-inch by 3 ½-inch members. Both older and newer jack rafters are connected to these valley beams. The valley beams are connected at the top to an old portion of ridge beam that is situated below the newer ridge beam. These two ridges are connected with a vertical piece of tongue and groove flooring (Figure 4.228).

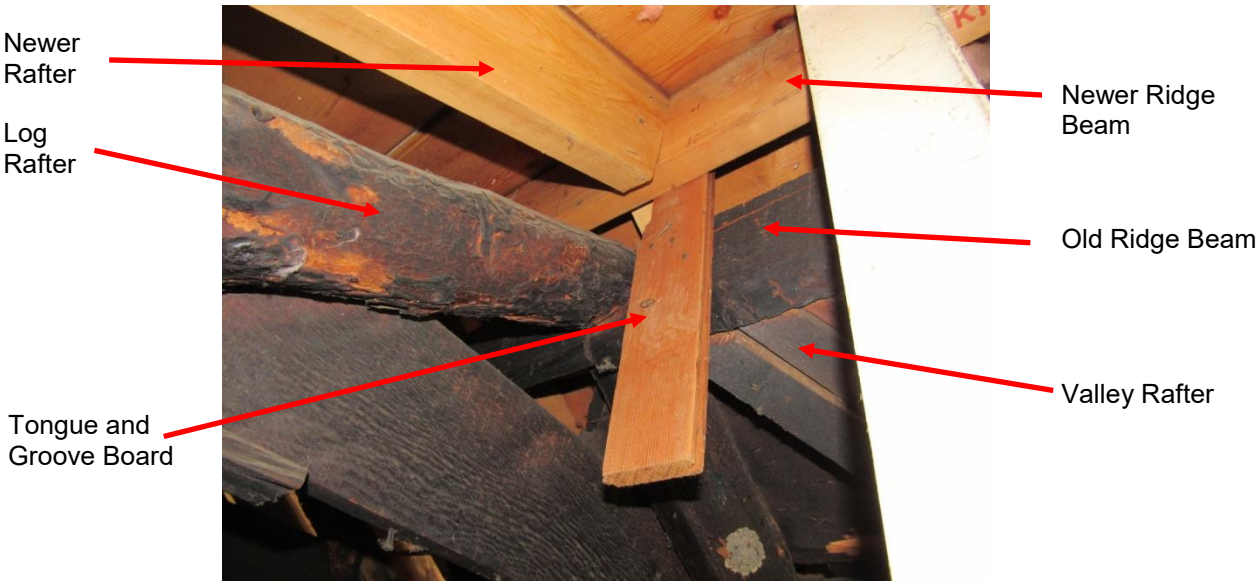


Figure 4.228. Roof framing at ridge, looking southwest. (SEA 2017)

In Room 304A, the valley beam has no connection or contact with the knee wall that should be supporting it. The valley beam is instead supported by an interior wall (Figures 4.229 and 4.230). The loads transferred into the interior wall have added to the deflection of the third floor framing.



Figure 4.229. Roof framing in Room 304, looking west. (SEA 2017)



Figure 4.230. Roof framing in Room 304A, looking west. (SEA 2017)

In Room 301 the valley beam is rotted extensively (Figure 4.231). Portions of this beam are rotted through completely. Like the other valley rafter, this also supports old and new jack rafters.



Figure 4.231. Valley rafter in Room 301, looking northwest. (SEA 2017)

Where the valley rafter connects to the knee wall, it is sistered with a newer member. This member does not have a strong connection to the knee wall, and the knee wall is out of plumb (Figures 4.232 and 4.233).

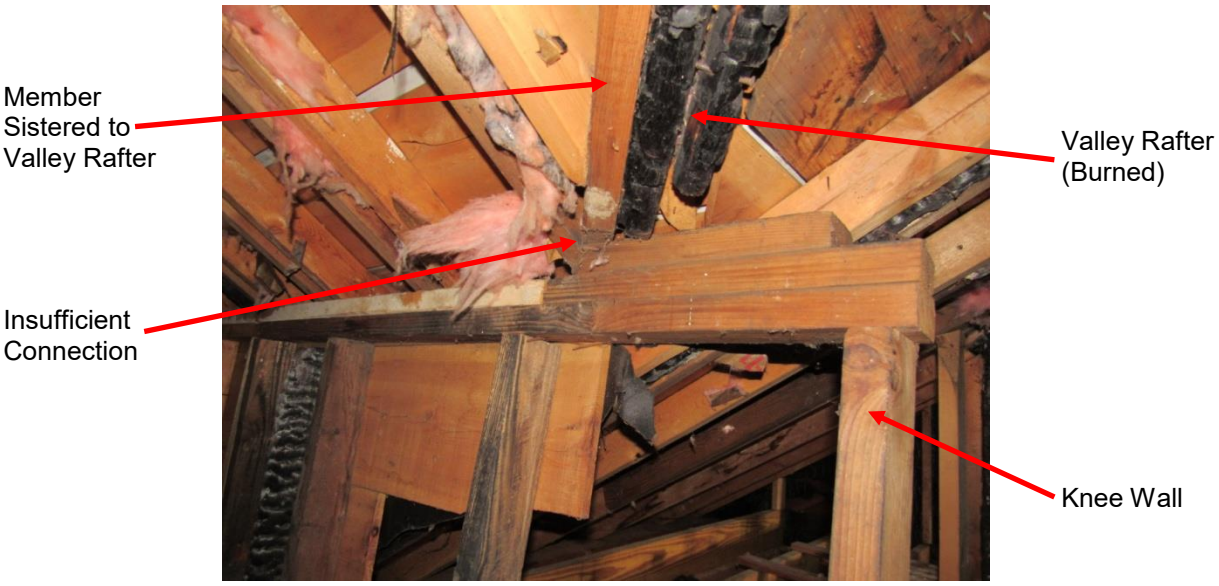


Figure 4.232. South valley rafter and knee wall, looking southwest. (SEA 2017)



Figure 4.233. South valley rafter and knee wall, looking northwest. (SEA 2017)

Like the north valley rafter, the south valley rafter is also transferring some load to internal walls instead of the exterior log walls.

Other issues in the main gable are that some of the newer rafters have been notched or stripped and therefore have a smaller cross section.

West Gable

The roof framing in Room 303, over the west porch, is primarily older lumber with newer members sistered to the lower portion of the south rafters (Figure 4.234). There are no logs in this area.



Figure 4.234. South rafters in Room 303, looking south. (SEA 2017)

The older rafters have some burn damage, but the depth of burn is not extensive where the rafters are not sistered.

Five rafters in Room 303 are not continuous members and have connections that are insufficient for carrying anticipated snow loads (Figure 4.235)



Figure 4.235. Rafter connection in Room 303.
Red arrow indicated insufficient splice connection. (SEA 2017)

The portion of the roof that extends over the west porch is supported by four columns. The portion over the east porch is supported by six columns. The roof support columns at the porches are wood posts with 1 inch or 1 ⅛-inch redwood cladding to make them approximately 8-inch square. The size and condition of the interior posts could not be observed. Column cladding has been damaged in various locations, reportedly by the woodpecker (Figure 4.236). The damage is covered by a white Tyvek type of material.



Figure 4.236. Damage at northwest post. (SEA 2017)

When the wrap was removed, dust fell out of the hole created by the woodpecker. The presence of the dust and the damage from the woodpecker could point to the possibility of the presence of wood boring insects in the structural column.

The conservatory has a hip roof with exposed wood framing. Typical member sizes are 1 ⅜-inch by 3-inch. The ridge beam is 1 ¾-inch by 5-inch. This represents re-framing after the conservatory glass roof was removed.

Exterior Walls

The exterior walls are horizontal log construction, clad with wood clapboard siding on the exterior and covered in lath and plaster on the interior. The condition of the logs is not observable save for a few locations inside the house where the plaster has been removed (Figure 4.237).



Figure 4.237. East wall, Room 101. (SEA 2017)

At an exposed portion of the wall in Room 101, the chinking is no longer adhered and dimensions of the wall section are able to be recorded. The thickness of the log portion of the wall measured an average of 7 ½-inches and the height of the log measured 12-inches. The logs are sawn on the inside of the wall and there is still bark present on the top and bottom of the log. This indicates that they are the central portion, or heartwood, of the tree, where exposed to view. There is no indication of rot or deterioration on these logs. The overall thickness of the lath and plaster here is 2-inches. The composition of the exterior sheathing or siding could not be determined.

In Room 200 a square opening has been cut in the log wall. The height of the logs here also measured 12-inches. The overall thickness varies from 5 ½-inches to 6 ½-inches.

The top of the logs at the third floor level, or roof plates, are visible in some places. In Room 304A the log is rotted below the sill plate of the framed knee wall (Figure 4.238).



Figure 4.238. Rotted log, Room 304a. (SEA 2017)

With rotted conditions seen on some second and third floor framing members where they are pocketed into the log walls, additional rot on logs in those areas is anticipated.

The logs are not visible from the exterior. Some of the window jambs and sills on the exterior have rot. This indicates water intrusion and possible damage (Figure 4.239).



Figure 4.239. Rotted framing, south window Room 302. (SEA 2017)

The house overall is significantly leaning to the south. At this time, it is unknown whether the leaning has been addressed completely or if the movement will continue. Drawings for structural repair of the log walls date from the 1970s. Repair details include wall bracing and log

replacement. The bracing may prevent the house from leaning further. The extent of lean is most prominent at the north elevation (Figure 4.240).



Figure 4.240. Looking East, second level of north elevation. (SEA 2017)

The exterior walls of the conservatory are concrete block veneer over wood framing. Some of the mortar joints have visibly been repointed below the windows.

Chimneys

The portion of the chimneys visible in the basement level was discussed previously in the foundations section of this report.

The northwest chimney projects above the roof, which is the only other place where the structure of the chimney is visible. Decorative wood surrounds the fireplace in Room 104 and plaster covers the chimney in Room 203. Above the roof the brickwork has open mortar joints (Figure 4.241). The chimney also leans slightly to the west, approximately 1-degree. There also no cap on the northeast chimney (Figure 4.241).



Figure 4.241. View of northeast chimney. (SEA 2017)

The south chimney is also mostly obscured on the interior. On the exterior, the red brick projects out from the house exterior wall at the first level. The south walls of the bump-outs at the second level and above are flush with the chimney.

The brick below the roofline is of a different vintage than the brick above the roofline.

The portion of the chimney above the roofline has some open joints and loose brick (Figures 4.242).



Figure 4.242. View of south chimney. (SEA 2017)

Main House (HS-18) Existing Conditions – Mechanical and Electrical

Introduction - Main House (HS-18)

Henderson Engineers conducted a site visit on June 12th through 14th of 2017. The existing mechanical, electrical, and plumbing (MEP) systems within the main house are consistent with residential equipment found in homes of this size.

Existing utilities to the main house include electrical, natural gas, telephone, and well water. There are also signs of former sanitary and storm systems exiting the house. There is an existing heating system, security system, and fire alarm system.

The 2015 International Building Codes, including 2015 International Fire Code, 2015 International Plumbing Code, 2015 International Mechanical Code, 2015 International Fuel Gas Code, and the 2014 National Electrical Code (NEC) were used for the evaluation of the MEP systems.

Mechanical Systems

There is an existing gas-fired furnace in the basement mechanical room that provides heat throughout the house (Figure 4.243). The existing furnace was installed in 1976. There is no existing cooling system in the house. The furnace is fed from a 1-1/2-inch gas line (Figure 4.243). Overall the existing heating systems appears to be in good working condition, however the supply and return air distribution systems leave much to be desired. The site visit took place in the summer; therefore, the furnace was not operating at the time of the visit.

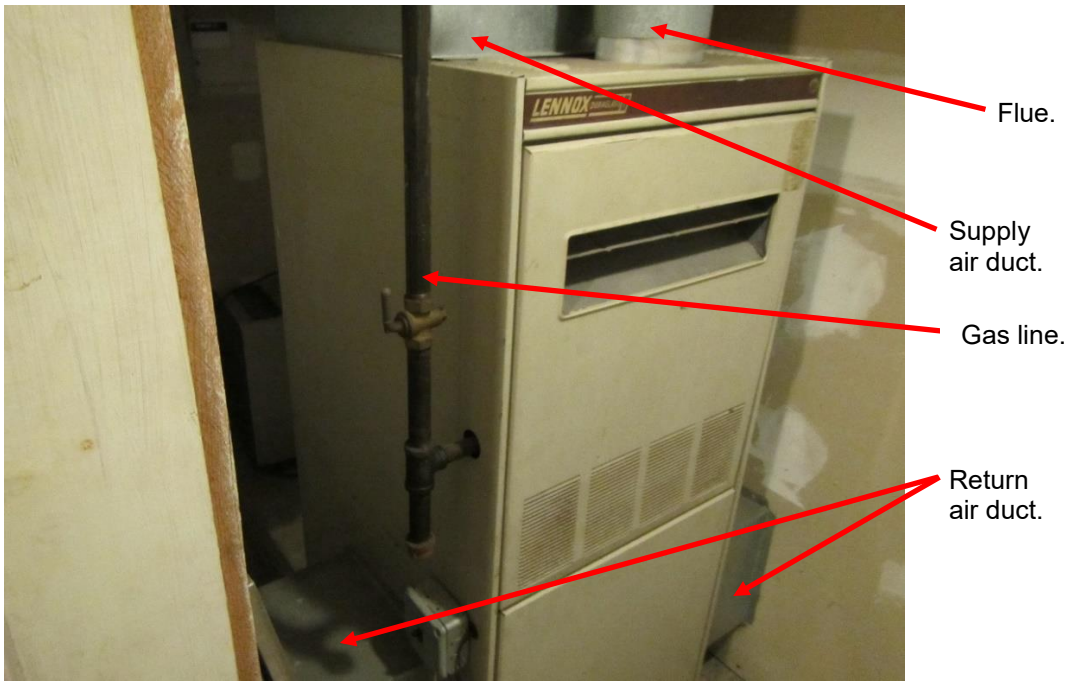


Figure 4.243. Existing furnace unit. (HEI 2017)



Figure 4.244. Main ductwork exiting top of furnace. (HEI 2017)

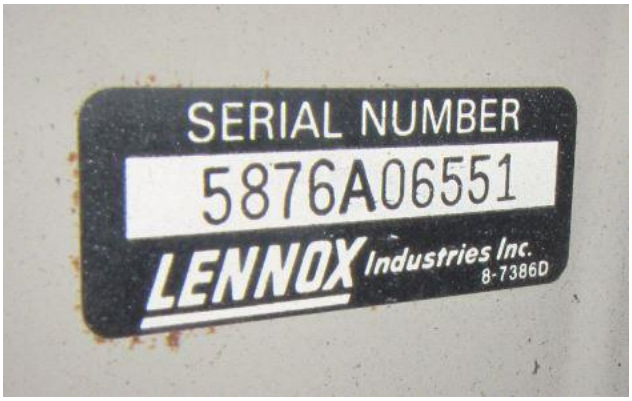




Figure 4.245 and 4.246. Furnace nameplates. (HEI 2017)

The flue from the furnace is routed overhead and up through the house within the chimney cavity (Figure 4.247).



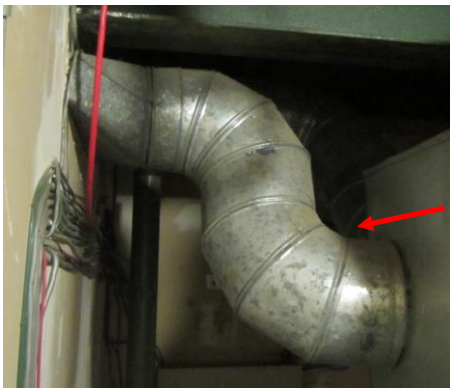
Figure 4.247. Flue routing from furnace to chimney chase. (HEI 2017)

The furnace is controlled by a single thermostat that is located just outside of the basement mechanical room (Figure 4.248). The thermostat contains mercury which can cause contamination if released.



Figure 4.248. Thermostat for control of furnace. (HEI 2017)

Supply air to the basement is provided through three small ducts that route overhead to feed three 2” x 12” diffusers located on three sides of the mechanical room (Figures 4.249 and 4.250).

Figures 4.249 and 4.250. Typical supply duct and diffuser in basement. (HEI 2017)

Supply air is distributed to the floors above through a series of five five-inch round ducts that are routed overhead in the basement from the furnace and up through the floor into walls and chases (Figures 4.251 through 4.254). The existing ductwork layout was well-planned and coordinate with architectural elements to ensure no visibility on the upper floors. Ductwork is concealed within wall cavities and chases on the first and second floors.






Figures 4.251 through 4.254. Typical supply ductwork to floors above. (HEI 2017)

Supply air to the first floor is fed from wall mounted diffusers (approximately 12” x 13”) that are connected to the sides of the concealed ducts (Figures 4.255 and 4.256).





Figures 4.255 and 4.256. Typical wall mounted supply diffusers on first floor. (HEI 2017)

Supply air to the second floor is fed from floor mounted diffusers where the ducts from the floors below terminate (Figure 4.257). The existing ducts are not adequately sized to supply both the second and third floors. Providing dedicated ductwork to supply air to the third floor bedrooms would greatly enhance the existing supply air system.



Figure 4.257. Typical floor mounted supply diffuser on second floor. (HEI 2017)

No supply air is provided to the third floor; however, registers are installed in the floor of the third floor rooms to allow air to transfer from the second floor below through registers in the ceilings of the second floor rooms (Figures 4.258 and 4.259).




Figures 4.258 and 4.259. Typical floor and ceiling mounted registers on second and third floor. (HEI 2017)

Return air is fed back to the unit through 12” x 12” ducts that are connected to two sides of the unit and routed to return air grilles located on two sides of the mechanical room (Figures 4.260 and 4.261). The filters were clean and appeared to have been recently replaced at the time of the survey. Overall, the current return air system for the house is not ideal. Transfer openings in the second floor bedrooms and in the door at the base of the steps leading from the first floor to the basement would create a better return air path from the upper levels back to the furnace.




Figures 4.260 and 4.261. Return ductwork and grille. (HEI 2017)

Electrical Systems

The main electrical service enters the house at the southeast corner of the basement through a 1-1/2-inch PVC conduit (Figure 4.262).



Figure 4.262. Incoming service entrance feeder. (HEI 2017)

The incoming feeder terminates at a 100-amp, 2-pole, 120/240-volt, single-phase load center located in the basement (Figures 4.263 and 4.264). There is a surge arrestor installed to protect the load center (Figure 4.263). Power to some basement devices is live, but power to the rest of the house is not currently active.





Figures 4.263 and 4.264. Main electrical load center and surge arrestor. (HEI 2017)

There is a 30-amp, 3-pole safety disconnect in the basement near the main load center that serves an unknown exterior load (Figure 4.265). The circuit routes through flexible metallic conduit from the disconnect through the north wall to below grade (Figures 4.265 and 4.266).





Figures 4.265 and 4.266. Disconnect serving exterior loads. (HEI 2017)

There is a 30-amp, 2-pole safety disconnect in the basement adjacent to the interior well pump and storage tank that serves the pump and mixer (Figure 4.267). This equipment is not currently functioning.



Figure 4.267. Disconnect serving interior well pump and mixer. (HEI 2017)

There are duplex receptacles located throughout the house to provide general purpose power (Figures 4.268 and 4.269). Some finished areas have devices fed from concealed wires/conduit routed within the walls, but devices in a number of areas are fed from surface mounted raceways, conduits, wires, or cables (Figures 4.268 through 4.271).





Figures 4.268 and 4.269. Examples of duplex receptacle types. (HEI 2017)

In rooms that have walls and ceilings intact, there are wall and ceiling mounted porcelain and brass lamp holders (light sockets) and junction boxes throughout the house that previously housed incandescent lamps and chandeliers (Figures 4.270 and 4.271).





Figures 4.270 and 4.271. Typical lamp holders. (HEI 2017)

There is a timeswitch mounted adjacent to the main electrical panelboard for automatic control of the exterior site lighting poles3 (Figure 4.272).



Figure 4.272. Timeswitch. (HEI 2017)

Standard toggle and push-button type switches are utilized throughout the house for local control of the lighting in each room (Figures 4.273 and 4.274). With the exception of a single switch in the basement, the light switches are not currently functioning.

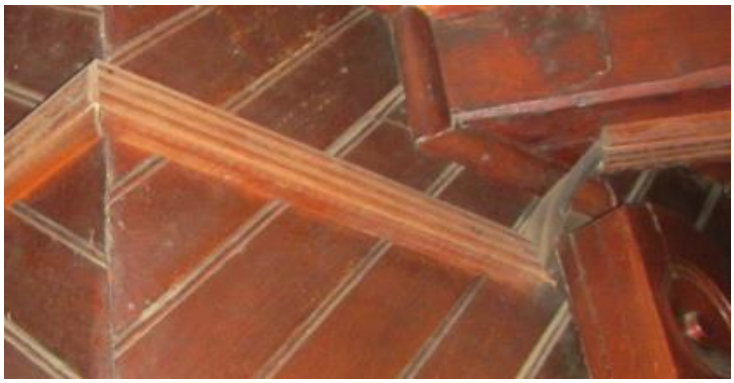




Figures 4.273 and 4.274. Typical light switches. (HEI 2017)

There is existing surface mounted wooden raceway with cloth wiring utilized throughout. In some locations the cloth wiring is exposed (Figures 4.275 through 4.278). The exposed wiring is more susceptible to damage and is a safety concern. In addition, cloth wiring is outdated and is no longer an accepted wiring method.





Figures 4.275 and 4.276. Wooden raceway and exposed cloth wiring in Dining Room. (HEI 2017)





Figures 4.277 and 4.278. Wooden raceway and exposed cloth wiring in second floor hall. (HEI 2017)

There is an existing lightning protection system installed on the house. Air terminals are located on the roof peaks and are connected to downleads that run down the exterior of the house in 3-4 locations that presumably connect to below grade ground rods (Figures 4.279 through 4.283).





Figures 4.279 and 4.280. Lighting protection system air terminals and downleads. (HEI 2017)







Figures 4.281, 4.282, and 4.283. Lighting protection system downleads. (HEI 2017)

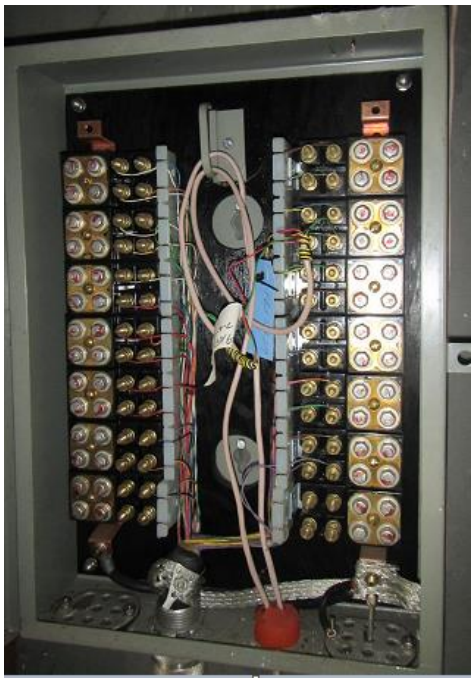
It is unclear how many ground rods exist or if all connections have been made and are still secure. There appears to be an existing ground rod at the southeast corner of the front porch, however there is nothing connected to it above grade (Figure 4.284).



Figure 4.284. Ground rod. (HEI 2017)

There is an existing telephone distribution board located adjacent to the main electrical panelboard in the basement (Figures 4.285 and 4.286). This system likely served the storehouse building via below grade conduit and cable. The exact routing of the conduit/cabling is unknown at this time.





Figures 4.285 and 4.286. Telephone distribution board. (HEI 2017)

There is an existing security system installed in the house. The main security system control panels for all buildings on site are located in the basement, outside of the mechanical room (Figures 4.287 through 4.292). These panels are no longer connected to the outbuildings.













Figures 4.287 through 4.292. Main security system panels for all buildings. (HEI 2017)

There are keypad stations for disarming and arming the system in two locations in the main house. One is located outside of the basement mechanical room and the other is just inside the main entry door (Figures 4.293 and 4.294). Upon alarm activation, a silent alarm is sent to park headquarters.



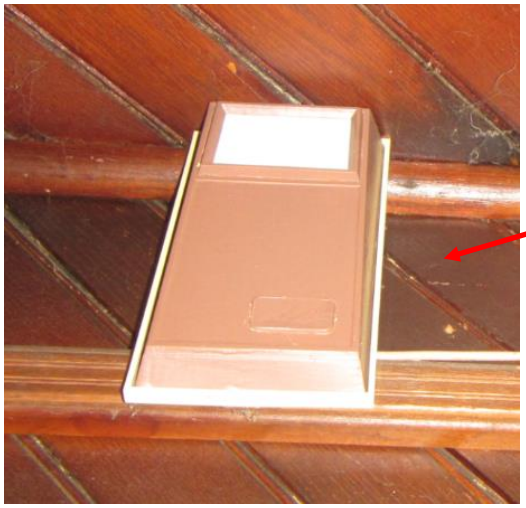


Figures 4.293 and 4.294. Security system keypads. (HEI 2017)

There are wall mounted, hard-wired motion detectors located in the basement and dining room (Figures 4.295 and 4.296).

Basement





Dining Room

Figures 4.295 and 4.296. Typical security system motion detectors. (HEI 2017)

There is a speaker/siren for the security system that is located at the base of the stairs leading from the main level to the basement (Figure 4.297). This speaker/siren is not currently functioning.



Figure 4.297. Security system speaker/siren. (HEI 2017)

Plumbing Systems

There are two, 4-inch main sanitary lines that exit the house. One exits through the floor in the southeast corner of the main basement area and one exits through the south wall west of the chimney mass in the main basement area (Figures 4.298 and 4.299). The below grade sanitary lines have been scoped, and it appears that both lines have collapsed approximately 25 feet south of the house. Hand-written notes scanned on 1975 NPS construction drawings indicate that the scope of the 1976 work included an arrow pointing to a 42-inch diameter circle, stating the "Sewage ejection pump and housing. Remove to 6-inches below grade infill with topsoil."





Figures 4.298 and 4.299. Main sanitary exits in basement. (HEI 2017)

When the restaurant functioned in the house, there were reportedly restrooms for patrons located in the basement. Their exact location and layout is unknown.

There is only a single bathroom located on the third floor that used to contain a water closet, a bath tub, and a sink (Figures 4.300 and 4.301). The 4-inch sanitary line drops down from the bathroom in the southeast corner of the house, is exposed in Bedroom 201 on the second floor, and concealed with a board furring in the Parlor on the first floor.





Figures 4.300 and 4.301. Sanitary and domestic water piping in the second floor bathroom. (HEI 2017)

The main gas line enters through the east wall of the house in the basement. It is a 1-3/4-inch black steel pipe. It is routed overhead to feed the gas-fired furnace located in the mechanical room (Figures 4.302 and 4.303). It is understood from the park staff to be active, although the furnace was not in operation during the summer building survey.





Figures 4.302 and 4.303. Gas service pipe to furnace. (HEI 2017)

There is currently no active water service to the house. A ¾-inch water line currently enters through the north wall of the basement in the northeast corner of the house. It is assumed that this line is fed from a well that is located north of the Chapel. The well is covered and is no longer in use; therefore, its condition is unknown. The water line ties into a storage tank that is located in the northeast corner of the basement and an existing in-line pump ahead of the tank was used to pull water from the well (Figure 4.304). Two hose bibbs are connected to the tank for retrieving water from the tank (Figure 4.305).



Figure 4.304. Water line from well and in-line pump. (HEI 2017)



Figure 4.305. Storage tank and hose bibbs in basement. (HEI 2017)

Storm drainage from the roof is collected in gutters and routed to below grade through six 4-inch downspouts with corrugated downspout boots (Figures 4.306 and 4.307). Some of the downspouts are damaged and not connected to the downspout boots (Figure 4.307). The below grade storm pipes have been scoped and they appear to route straight to the east to daylight towards the ravine.





Figures 4.306 and 4.307. Typical gutters and downspouts for storm drainage. (HEI 2017)

Fire Protection Systems

The main fire alarm control panels are located in the basement, inside out outside of the mechanical room. There is a temperature sensor adjacent to one of the the panels that ties into the panel and also a connection to a phone line for sending a signal to the Owner upon the temperature in the space reaching predetermined setpoints or upon activation of a fire alarm device (Figure 4.308 and 4.309). It is unknown at this time if this system is fully functional.

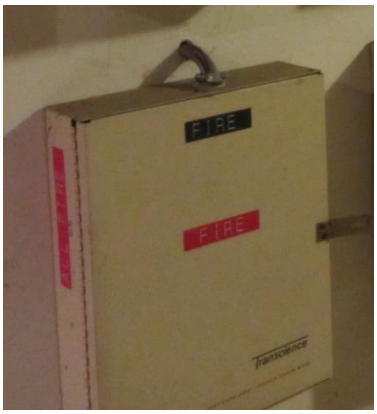



Figure 4.308 and 4.309. Main fire alarm control panels in basement. (HEI 2017)

There is a fire alarm pull station located just inside the front door on the main level and just outside of the mechanical room in the basement (Figures 4.310 and 4.311).





Figures 4.310 and 4.311. Fire alarm pull stations. (HEI 2017)

There is a hard-wired ceiling mounted smoke detector located on each floor of the house (Figure 4.312).



Figure 4.312. Typical smoke detector. (HEI 2017)

There is a wall mounted fire alarm bell located on each of the top two levels (Figure 4.313). The functionality of the bells is unknown.



Figure 4.313. Typical fire alarm bell. (HEI 2017)

Conclusion

The existing mechanical, electrical, plumbing, telephone, and security systems in the house date to different periods. The furnace appears to function, but has limited service to the upper floors. The security alarm is functioning in the main house. The functionality of the fire alarm system is unknown. The water service has been turned off so the functionality of the of the well and piping is unknown. Sanitary service has been disconnected and no longer serves the house in any capacity. The existing electrical service is currently only being utilized to power the furnace and select few lights and receptacles in the basement.

Significant historic features include exposed surface mounted wooden raceway and porcelain sockets. Historic metal grates and vents are located throughout the house. Brass lamp bases in the dining room are early and significant.

Main House HS-18 Character Defining Features

The Main House has retained a substantial amount of its exterior and interior character defining features from the period of significance. The ongoing maintenance and preservation of these unique features and visual aspects of the building ensure the historic integrity of the building and site will survive for future generations.

Exterior Character Defining Features include:

- Retention of original setting.
- Overall shape of the building, two and one-half story massing with raised basement, gabled roof, and dormer windows.
- West and East two-story porches.
- Original log interior walls.
- Late Victorian / Eastlake exterior and interior styling, as renovated in the late nineteenth and early twentieth centuries.
- Native stone foundation.
- Brick chimneys.
- Rusticated cast concrete east porch and steps (reconstruction of original).
- Original window fenestration and door openings from original ca. 1834 structure, and original window sashes and exterior doors from the later renovations through 1907.
- Rusticated cast concrete Conservatory addition (glass roof missing).

Interior Character Defining Features

- ca. 1900 First floor and upper floor hallways.
- ca. 1834 Exposed wood beams in Rooms 104 and 201. Wood beams remain concealed throughout the house.
- ca. 1900 Millwork (trim, baseboards, thresholds, built-in cabinetry, beaded board paneling).
- Two ca. 1900 wood staircases and balustrades.
- ca. 1834 and ca. 1900 window openings, trim, and sashes.
- ca. 1834 and ca. 1900 Door openings, doors, trim and hardware.
- ca. 1900 Fireplace and mantlepiece in Dining Room.
- Nineteenth century decorative wood floors.
- Wooden wire mold, as seen in public spaces.
- Parlor 101 fireplace and fireplace surround.

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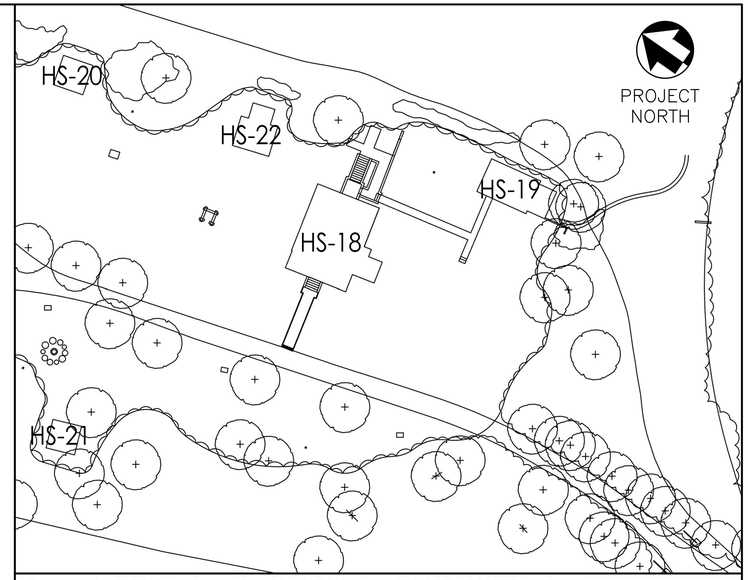
CULTURAL LANDSCAPE AND HISTORIC STRUCTURES REPORT

BAILLY HOMESTEAD

INDIANA DUNES NATIONAL LAKESHORE

EXISTING CONDITIONS DRAWINGS

PORTER, INDIANA



BAILLY HOMESTEAD, INDIANA DUNES NATIONAL LAKESHORE, PORTER, INDIANA



HS-18 MAIN HOUSE (STRATA 2017)

INDEX OF DRAWINGS

00 COVER

HS-18 MAIN HOUSE
ARCHITECTURAL
A1 BASEMENT AND FIRST FLOOR PLAN
A2 SECOND AND THIRD FLOOR PLAN
A3 ROOF PLAN
A4 ELEVATIONS
A5 ELEVATION
A6 ELEVATION
A7 BUILDING SECTION

HS-19 BRICK HOUSE
ARCHITECTURAL
A9 FLOOR PLANS
A10 ELEVATIONS
A11 BUILDING SECTION

HS-20 TWO-STORY LOG HOUSE
ARCHITECTURAL
A12 CRAWL SPACE AND FIRST FLOOR PLANS
A13 SECOND FLOOR AND ROOF PLANS
A14 ELEVATIONS
A15 ELEVATIONS
A16 BUILDING SECTION

HS-21 STOREHOUSE
ARCHITECTURAL
A17 FIRST FLOOR AND ROOF PLANS
A18 ELEVATIONS
A19 BUILDING SECTION

HS-22 CHAPEL
ARCHITECTURAL
A20 CRAWL SPACE AND FIRST FLOOR PLANS
A21 ROOF PLAN
A22 ELEVATIONS
A23 ELEVATIONS
A24 BUILDING SECTION

CULTURAL LANDSCAPE AND HISTORIC STRUCTURES REPORT

UNITED STATES DEPARTMENT OF THE INTERIOR

NATIONAL PARK SERVICE
DENVER SERVICE CENTER

TITLE OF PROJECT
EXISTING CONDITION DRAWINGS

COVER

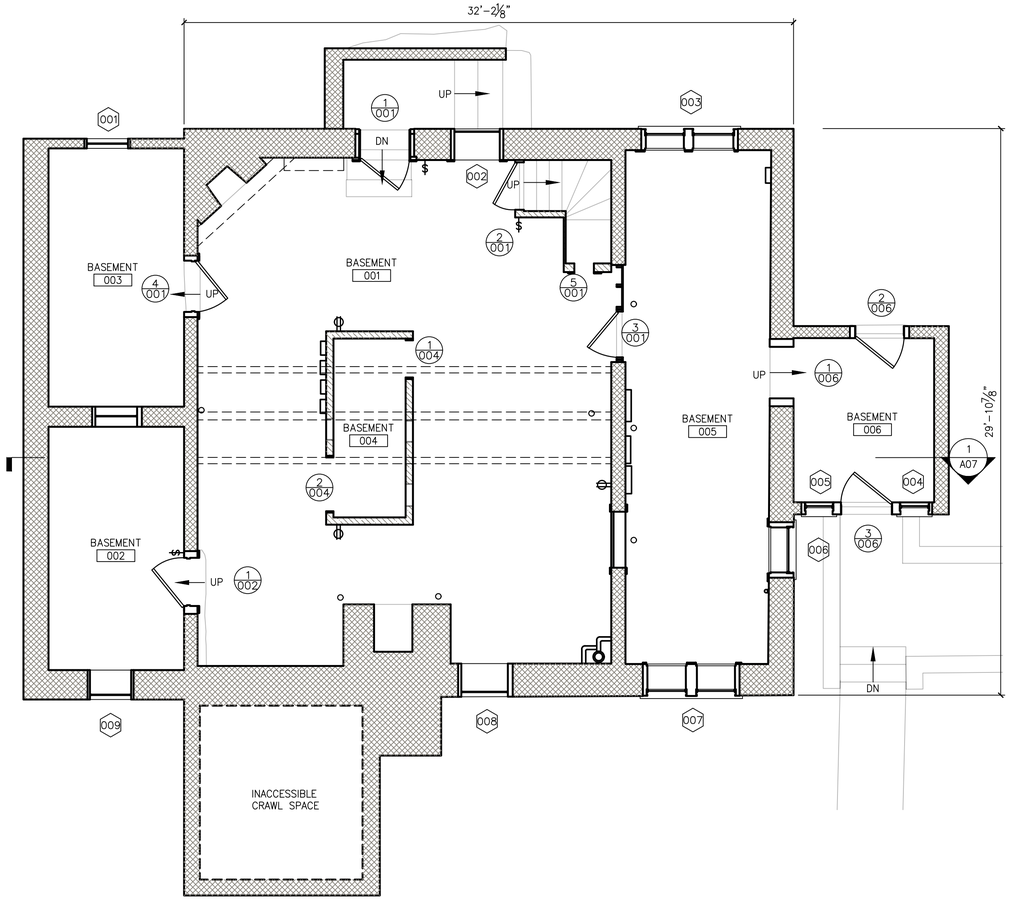
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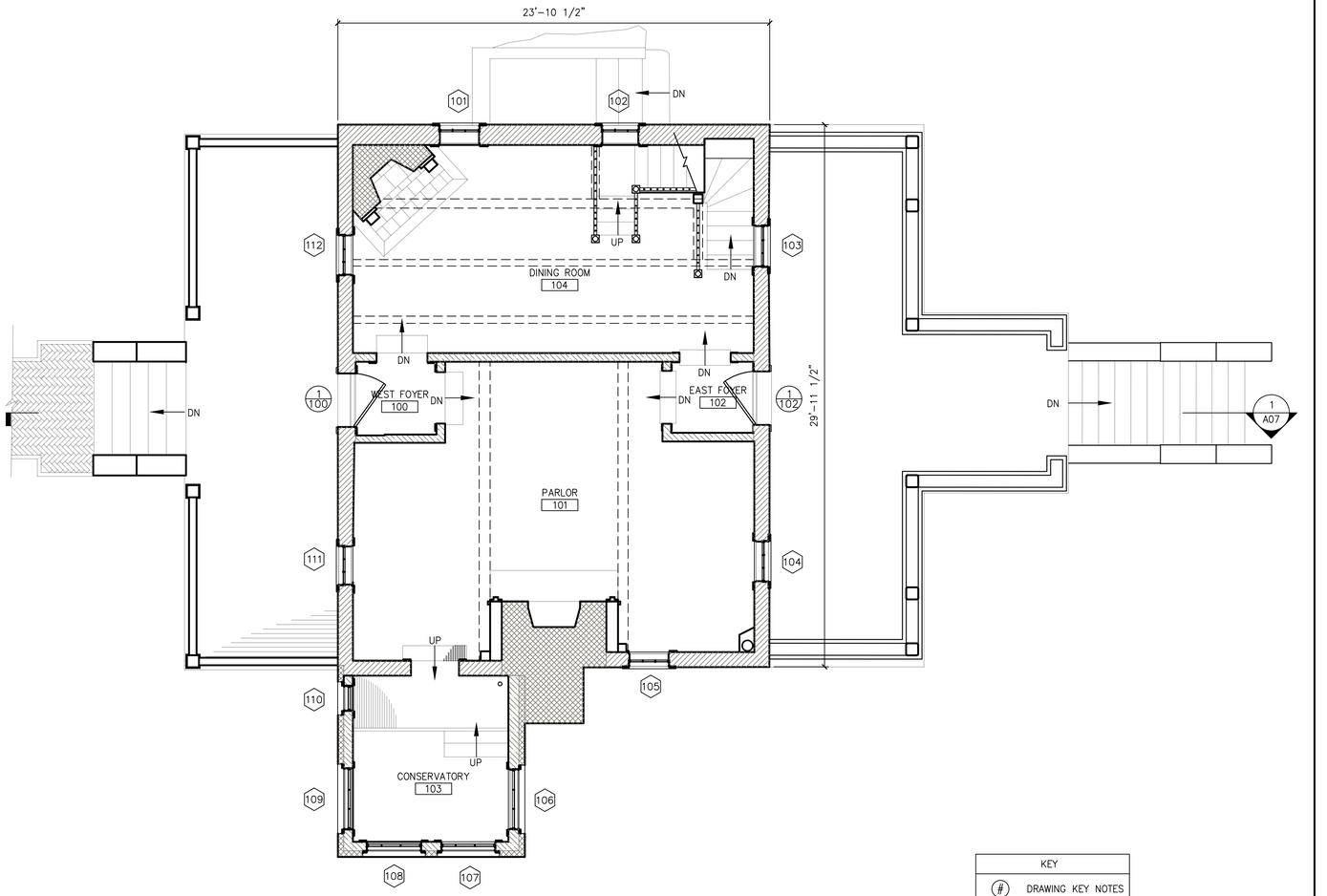
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SHEET 1 OF 24



1 A01 EXISTING BASEMENT FLOOR PLAN
1/4" = 1'-0"

PROJECT NORTH



2 A01 EXISTING FIRST FLOOR PLAN
1/4" = 1'-0"

PROJECT NORTH

KEY	
(#)	DRAWING KEY NOTES
000	WINDOW NUMBER
000/0	DOOR NUMBER
000	ROOM NUMBER
	BRICK/STONE WALL
	LOG WALL
	WOOD FRAME WALL

4 0 4 8
SCALE OF FEET

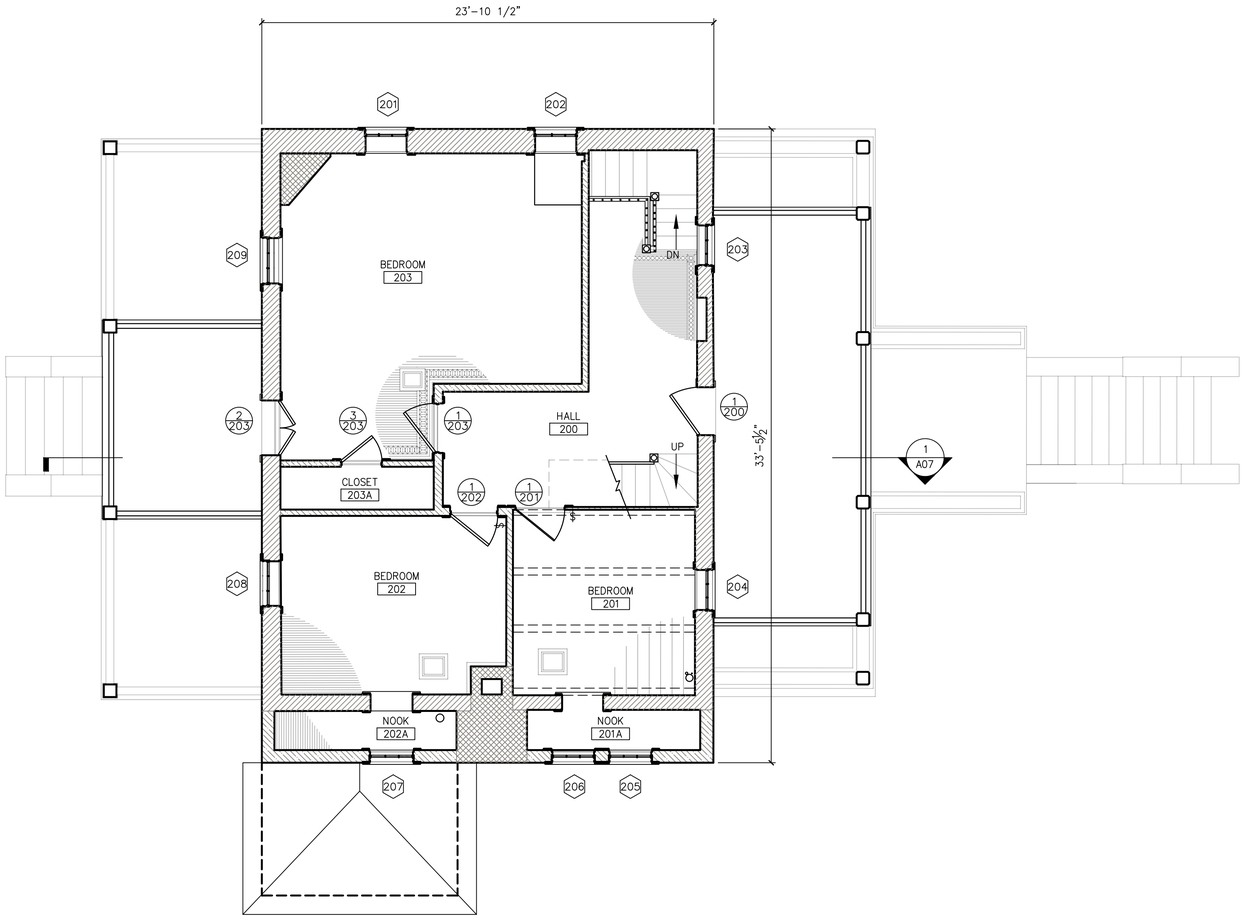
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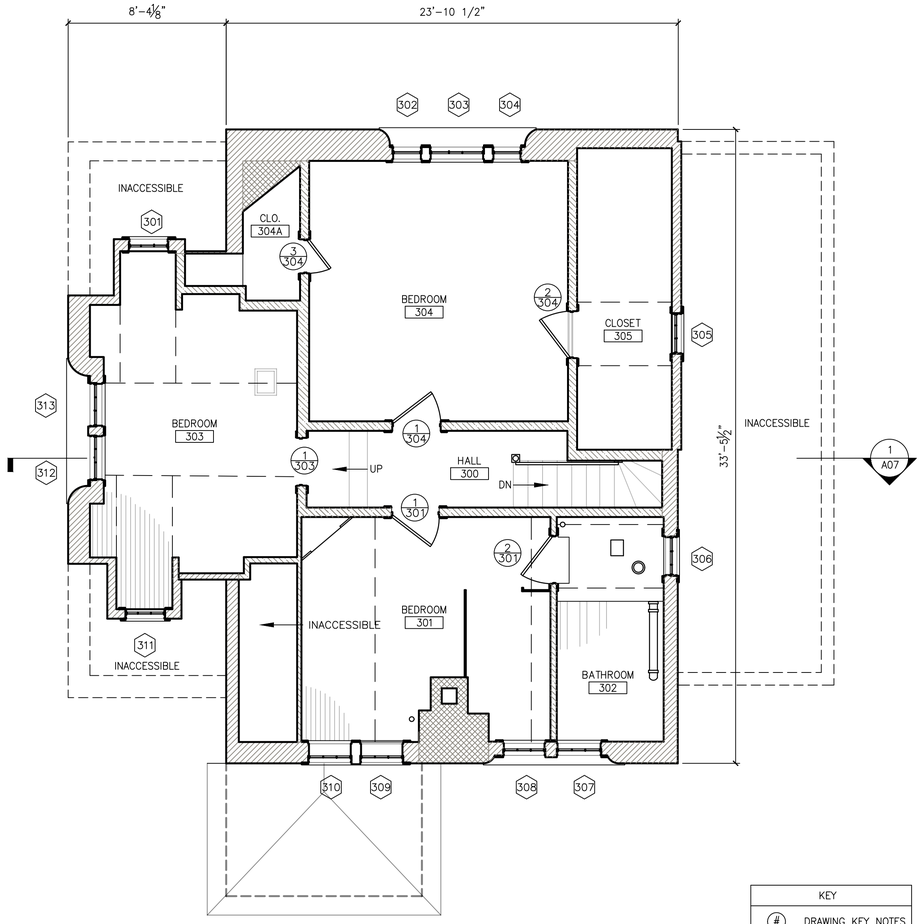
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MAIN HOUSE
BAILLY HOMESTEAD
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SHEET 2 OF 24



1 A02 EXISTING SECOND FLOOR PLAN
1/4" = 1'-0"

PROJECT NORTH



2 A02 EXISTING THIRD FLOOR PLAN
1/4" = 1'-0"

PROJECT NORTH

KEY	
#	DRAWING KEY NOTES
000	WINDOW NUMBER
000/0	DOOR NUMBER
000	ROOM NUMBER
	BRICK/STONE WALL
	LOG WALL
	WOOD FRAME WALL

4 0 4 8
SCALE OF FEET

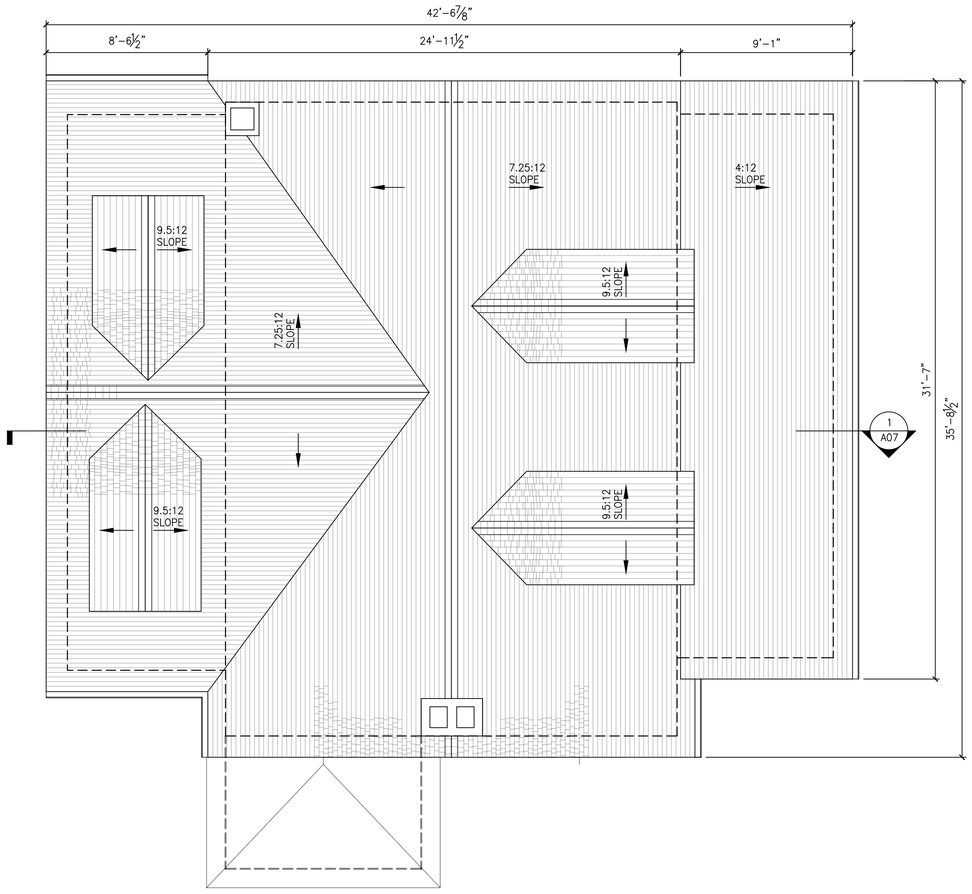
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TITLE OF SHEET
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SHEET 3 OF 24



1 A03 EXISTING ROOF PLAN
1/4" = 1'-0"

PROJECT NORTH

4 0 4 8
SCALE OF FEET

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TECH. REVIEW: AG
DATE: 05/07/18

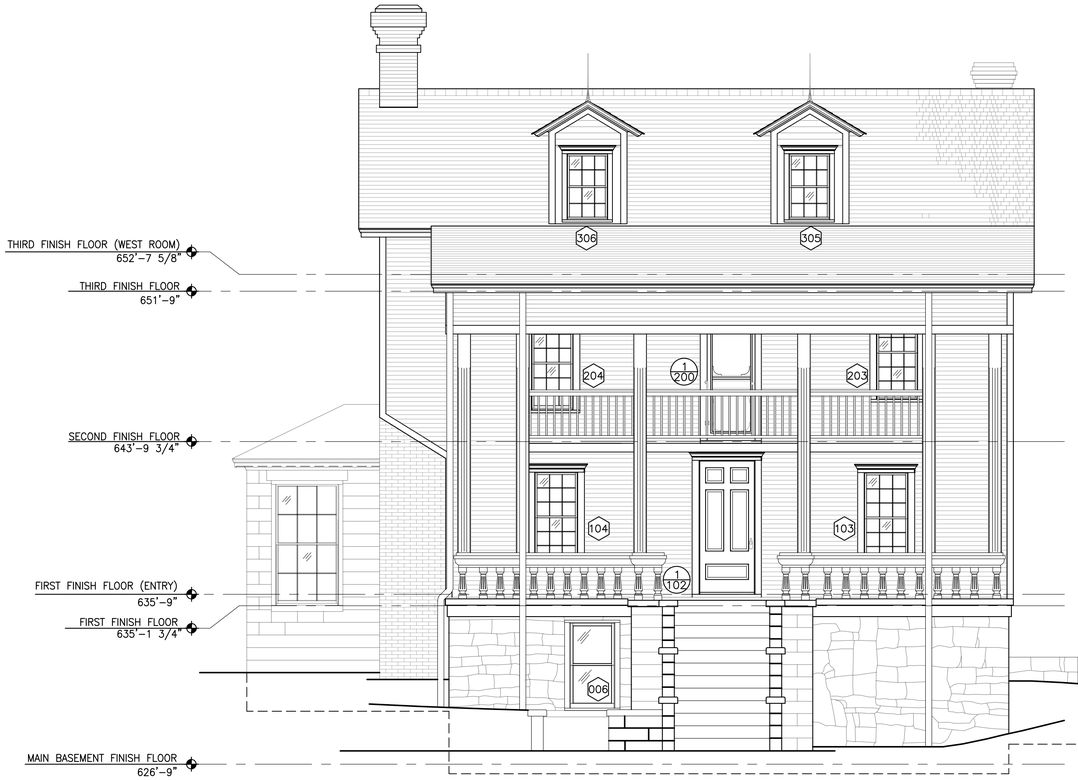
SUB SHEET NO. A03

TITLE OF SHEET
EXISTING CONDITION DRAWINGS
HS-18
MAIN HOUSE
BAILLY HOMESTEAD
INDIANA DUNES NATIONAL LAKESHORE
PORTER, INDIANA

DRAWING NO. 626 138616
PMIS/PKG NO. 20940
SHEET 4 OF 24



1 A04 EXISTING WEST ELEVATION
1/4" = 1'-0"



2 A04 EXISTING EAST ELEVATION
1/4" = 1'-0"

KEY	
#	DRAWING KEY NOTES
000	WINDOW NUMBER
000/0	DOOR NUMBER
000	ROOM NUMBER

4 0 4 8
SCALE OF FEET

STRATA
ARCHITECTURE + PRESERVATION
1701 Oak Street, Suite 100
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www.strata-arch.com

DESIGNED: CA
DRAFTED: CA
TECH. REVIEW: AG
DATE: 05/07/18

SUB SHEET NO. A04

TITLE OF SHEET
EXISTING CONDITION DRAWINGS
HS-18
MAIN HOUSE
BAILLY HOMESTEAD
INDIANA DUNES NATIONAL LAKESHORE
PORTER, INDIANA

DRAWING NO. 626 138616
PMIS/PKG NO. 20940
SHEET 5 OF 24



1 / A05 EXISTING SOUTH ELEVATION
1/4" = 1'-0"

KEY	
#	DRAWING KEY NOTES
000	WINDOW NUMBER
000 / 0	DOOR NUMBER
000	ROOM NUMBER

4 0 4 8
SCALE OF FEET

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DRAWN: CA
TECH. REVIEW: AG
DATE: 05/07/18

SUB SHEET NO. A05

TITLE OF SHEET
EXISTING CONDITION DRAWINGS
HS-18
MAIN HOUSE
BAILLY HOMESTEAD
INDIANA DUNES NATIONAL LAKESHORE
PORTER, INDIANA

DRAWING NO. 626 / 138616
PMIS/PKG NO. 20940
SHEET 6 OF 24



1 A06 EXISTING NORTH ELEVATION
1/4" = 1'-0"

KEY	
#	DRAWING KEY NOTES
000	WINDOW NUMBER
000 / 0	DOOR NUMBER
000	ROOM NUMBER

4 0 4 8
SCALE OF FEET

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SUB SHEET NO. A06

TITLE OF SHEET
EXISTING CONDITION DRAWINGS
HS-18
MAIN HOUSE
BAILLY HOMESTEAD
INDIANA DUNES NATIONAL LAKESHORE
PORTER, INDIANA

DRAWING NO. 626 138616
PMIS/PKG NO. 20940
SHEET 7 OF 24



1/A7 EXISTING BUILDING SECTION
1/4" = 1'-0"

KEY	
#	DRAWING KEY NOTES
000	WINDOW NUMBER
000/0	DOOR NUMBER
000	ROOM NUMBER

4 0 4 8
SCALE OF FEET

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SUB SHEET NO. A07

TITLE OF SHEET
EXISTING CONDITION DRAWINGS
HS-18
MAIN HOUSE
BAILLY HOMESTEAD
INDIANA DUNES NATIONAL LAKESHORE
PORTER, INDIANA

DRAWING NO. 626
138616
PMIS/PKG NO. 20940
SHEET 8 OF 24



Brick House, view looking southeast. (Sheals 2017)

4 EXISTING CONDITIONS
BRICK HOUSE

Brick House (HS-19) Existing Conditions – Architectural

Existing plans and elevations of the Brick House can be found following this narrative. Required repairs and proposed treatments (narrative and drawings) can be found in the Chapter 6 Treatment Recommendations section of this report.



Figure 4.314. View of HS-19 Brick House, West and south elevations. (STRATA 2017)

The Brick House (HS-19) is located southeast of the Main House and backs up to the ravine and the river. This house was originally constructed ca. 1875 to serve as a kitchen and studio for Rose Bailly Howe. It was moved to its current site and built into the hillside in 1904, and the south addition was constructed around 1908. When the house was moved in 1904, the basement level may have come with the structure, or they may have chosen to construct a new basement to set the house atop.

The two-story brick building consists of two sections, the original brick two-story gabled structure, and the south addition with the hipped roof. The footprint of the building is 505 square feet. The main block of the house is 24’-4” (north/south) by 6’-2” (east/west), while the addition is 8’-6” (north/south) and 13’-3” (east/west). Overall square footage of each floor, including stairs and interior partitions is: 505 sf gross / 392 sf net.

The upper part of the house is separated from the basement with a three-course high projecting belt course. The foundation is a combination of brick, concrete masonry blocks, and concrete. It is likely that the original foundation was all brick, or a combination of brick and stone. The concrete masonry block and the concrete sections of the foundation are from more recent underpinning and stabilization projects. The exterior walls of the main section of the house are three wythes of brick thick. The floor and roof framing is dimensional lumber. The addition also has a combination of brick, concrete masonry blocks, and concrete foundations. The first and second floor walls are constructed of balloon-framed, dimensional 2x4 framing, which is clad with four-inch brick and rusticated cast concrete block veneer; brick on the basement and first floor levels and rusticated cast concrete block at the second floor and at the corners. The floor and roof framing is dimensional lumber. Two chimneys are located on the roof; one is centered on the north gable, and the second is near the southwest corner of the main block. The roof is wood shingles over an asbestos underlayment. The north chimney was reconstructed over the existing truncated flue. This chimney has a cement mortar cap. The 1976 rehabilitation drawings are not clear regarding what was remaining of the south chimney before construction. Details are provided for its reconstruction, which includes a combination of wood and steel framing and an interior steel column. This chimney is also capped.

Window and door openings in the main block of the house are all constructed with brick jack arches. The wood door and window jambs are squared at the top. Windows in the addition have cast stone lintels. The only entry into the first floor is located on the north side of the west elevation. This door was added to the structure after the building was moved. Windows in the west elevation include a 4/4 double-hung window on the first and second floor, centered between the door and the southwest corner of the main block. An opening into the basement has been infilled with brick. This was once the location of a bulkhead door after the building was moved to this location. Windows in the addition include 2/2 double-hung windows on the first and second floor. A small opening at the basement level provides access into the basement; this opening once contained a 4-lite sash window, per the ca. 1919 photograph. This opening is covered with a painted plywood hinged access door. The south elevation of the addition has two 2/2 double-hung windows on the first and second floors. The east elevation of the addition is the same as the west elevation. The east elevation of the main block contains two 4/4 double-hung windows per floor. The southern-most windows do not align, due to the interior stair. The north elevation contains a single 4/4 double-hung window and an inset cross with a small gable accent. The foundation is vented through two openings on the north elevation, one of which is infilled with plywood. Windows do not all close properly or have sash locks, which presents a security concern.

The brick exterior is in fair overall condition, having witnessed a move and relocation of several windows and doors, to accommodate the building’s new orientation and adapted reuse as a single residence. Areas of brick patching can be seen where the beams for lifting the house were inserted during the foundation stabilization projects. Some evidence on the building interior indicates its former function and openings that were once located in the original east (now south) wall. This east wall faced the ravine. Due to the drop in grade, the basement in the original location was a walk-out and had a door and window also in east elevation. These can

still be seen in the basement between the main block and the 1908 addition (Figure 4.321). When the brick house was in its original location, perpendicular to the Main House, the main door to the first floor was in the west (now north) elevation, near the north corner. There were niches on either side of the door to accommodate Joseph and Mary statues, but the niches have since been infilled. There was another window on the first floor, which is now infilled. There was also a door in the second floor, directly above the first floor, which led from the second story of the brick house to an exterior breezeway the second story east porch of the Main House. This door was also infilled when the building was moved.

The building is set close to the ravine and river, where the soils have historically not been stable. This has resulted in some settling of the building over time. Two campaigns of foundation stabilization and repairs were completed in 1976 and in 2007. The building now appears to be stable and is monitored for further movement.

There are no gutters on the building. The brick foundation is dirty from the backsplash under the eaves. Mortar in these locations is washed out. The first photograph of the relocated brick house that has been found to date, ca. 1919-1934, does show that the house had gutters and downspouts, as did the adjacent laundry building. Because the cisterns in the yard south and east of the Main House were so close, it would not be a stretch to assume that the gutters and downspouts may have aided in filling the cisterns. In Figure 2.84, the gutters are visible, as is what looks to be a well pump just north of the brick house. The building was re-roofed in the mid-century with what appear to be red hexagonal asphalt shingles, and the gutters had been removed by then (Figure 2.90). A porch hood and wood stoop with a decorative painted wood railing first appear in the 1972 photographs (Figures 2.91 and 2.92); therefore, the date of the construction would be between 1919 and 1972.



Figure 4.315. View of HS-19 South elevation. (STRATA 2017)



Figure 4.316. View of HS-19 East elevation. (STRATA 2017)



Figure 4.317. View of HS-19 East elevation. (STRATA 2017)

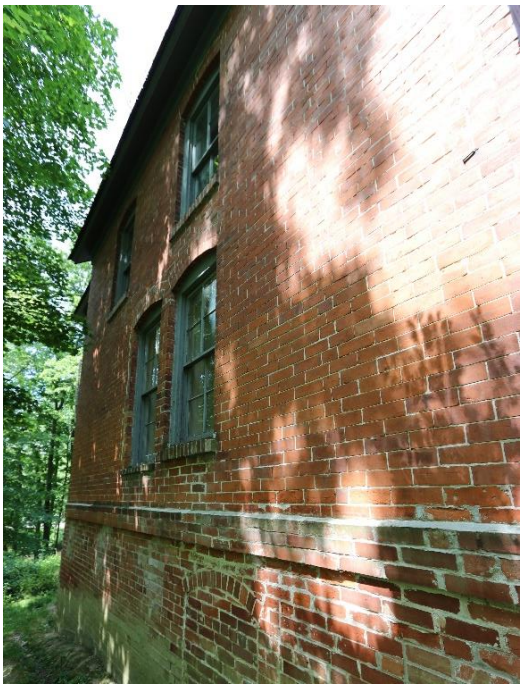


Figure 4.318. View of HS-19 East elevation. (STRATA 2017)

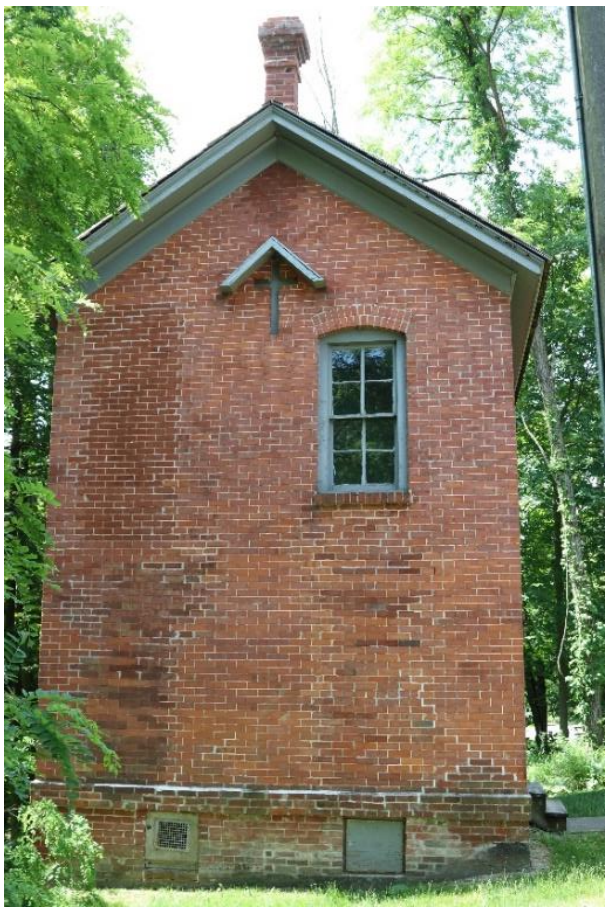


Figure 4.319. View of HS-19 North elevation. Gas and electric meters were once installed on this elevation and removed during the 1976 rehabilitation. (STRATA 2017)

The Brick House is currently not in occupiable condition on the interior. Due to the significant structural stabilization of the foundations, all of the utilities that once served the building (water, gas, electrical, telephone, and sanitary) have all been disconnected and removed from the house. There are no connections to any of these utilities left remaining. It has been at least 46 years, and maybe longer, since the house was last occupied. The interior is scattered with debris from previous demolition projects and garbage.

Existing Conditions Interior – Basement/Foundation

The basement is only accessible from the access panel through the west elevation foundation wall. A ladder must be inserted into the opening to reach the basement floor level. The basement consists of a small Room 001 under the south addition and two rooms under the main portion of the house. These two rooms are located on the east (Room 002) and west (Room 003) sides of the building and are divided by a two-wythe brick wall that appears to be original to the house (Figures 4.320 – 4.333).

The 1975 NPS record drawings state that the basement at that time had a brick floor under the main block and a dirt floor, approximately two feet higher under the addition. There were brick buttresses noted along the west wall. The drawings also locate the opening in the first floor

framing where there was a previous stair. The drawings document that the NPS reconstructed the arch along the west wall where the bulkhead door was removed and infilled the opening. A new concrete footing was installed below grade, and based on the record drawings, it is likely that this was mainly along the west wall. The west wall was waterproofed with 15 lb. asphalt impregnated building paper. The 1977 *Historic Structures Preservation Guide Bailly Homestead* states,

> *The west wall foundation and lower brick wall were removed. New concrete footing and foundation was installed to a level of one foot below contoured ground level. Matching historical brick was located south of Geneva, Indiana. Upon completion of brickwork, the walls were cleaned and brick joints were repointed using mortar matching existing. Extensive roof rafter repair was done during roof reconstruction. All door and roof trim work was of new construction.*[343]

The house continued to shift, due to differential settlement of the foundations. The foundation was again stabilized in 2007, as the Summary of Work states that the building was an estimated eleven inches out of plumb to the east. This scope of work was based on a report produced by Fitzpatrick Structural Engineering in conjunction with Quinn Evans Architects and Terracon Consultants, Inc. in January 1998, where they identified that the building had tilted toward the east. Patches in the masonry can be found where the lift beams were needled through the building.[344]

Specifications and information was found in the maintenance files memorandum dating to 2007:

> *Most work will occur on the east, or river side of this house.*
> *Solving the Problem*
> *In the past, the west foundation wall of this house was stabilized and other repairs were completed. The foundation on the remaining three sides is being stabilized and extended below the frost line. The house is also being leveled, and a drainage system is being installed around the house. The repair work will eliminate the lean and seasonal shifting.*[345]

The house appears to be stable at this time, as is further discussed in the Structural section of this report. The basement is very damp and not well ventilated. This has exacerbated the deterioration of the first floor joists.

[343] Walter, *Historic Structures Preservation Guide Bailly Homestead,* 1977.
[344] Fitzpatrick, Thomas R., P.E., *Bailly Brick House, Indiana Dunes National Lakeshore Structural Inspection & Stability Analysis*, 1998.
[345] Memorandum, INDU Maintenance Files, 2007.



Figure 4.320. Basement Room 001, looking west at entry. (STRATA 2017)



Figure 4.321. Basement Room 001, looking northwest at opening into the rest of the basement. This may have been an original exterior door opening when the building sat perpendicular to the Main House. (STRATA 2017)



Figure 4.322. Basement Room 001, looking up at the historic door arch that has failed. (STRATA 2017)





Figure 4.323. (Left) Looking east at the multi-wythe brick wall between Rooms 001 and 002. (STRATA 2017)
Figure 4.324. (Right) Room 001, looking northeast towards old window. (STRATA 2017)



Figure 4.325. Room 001, looking east towards Window 004. (STRATA 2017)



Figure 4.326. Room 002, looking north. (STRATA 2017)



Figure 4.327. Room 002, looking north at vent and deteriorated floor joists above. (STRATA 2017)



Figure 4.328. Room 002, looking south. (STRATA 2017)



Figure 4.329. Room 002, looking at lintel above opening into Room 003. Note the mortar on the sides of the joists indicate there were bricks between the joists at one time. (STRATA 2017)



Figure 4.330. Room 003, looking north. (STRATA 2017)



Figure 4.331. Room 003, looking east at infilled window. (STRATA 2017)



Figure 4.332. Room 003, looking at east wall. (STRATA 2017)

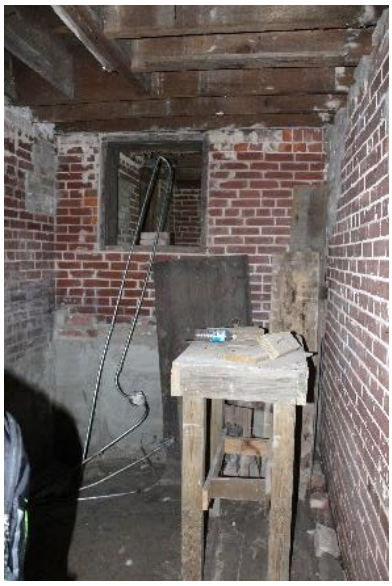


Figure 4.333. Room 002, looking south. The open framing for a previous stair to the basement can be seen in the upper left of the photograph. (STRATA 2017)

Existing Conditions Interior – First Floor

The first floor is approximately 506 gross square feet and is comprised of a kitchen, living room, and sitting room. The first floor is accessed through the front entry Door 1/100 by a set of wooden steps. The entry door, threshold, and floor inside the door are deteriorated and it is unsafe to stand in this area. The floor joists below are deteriorated, as noted in the Structural section of this report.

The interior layout of the house dates to the ca. 1904 renovation when the house was moved from its original location. The entry changed from the gable end to its current location, and windows and doors were moved and infilled on the exterior. All windows, doors, and trim within the house is painted and contains lead based paint. All of the interior painted surfaces are deteriorated and peeling.

Kitchen 101

The kitchen is approximately 124 square feet (Figures 4.334 – 4.338). The ceiling height in the kitchen is 7'-1". The kitchen cabinetry is missing, and all of the finishes are all in poor condition. The lath and plaster walls and ceiling are cracked throughout and there are layers of paper and peeling paint throughout. The case from an old baseboard radiator lines the south wall. Trim at the entry door is missing. The trim at the window and door into Room 102, as well as a majority of the baseboard, appear to date to the ca. 1904 renovation. The floor tiles are in poor condition and contain asbestos. Remnants of previous kitchen cabinets and backsplash is installed along the north wall. A plumbing chase for the second floor bathroom is located in the northwest corner of the room. The kitchen has one double-hung 4/4 wood window in the south portion of the east wall. This window is part of the original c. 1875 construction, as seen in a ca. 1890s photograph. The door is a replacement door from the 1976 rehabilitation.



Figure 4.334. Kitchen 101, looking east. All finishes are deteriorated. (STRATA 2017)



Figure 4.335. Kitchen 101, looking south. All finishes are deteriorated. (STRATA 2017)



Figure 4.336. Kitchen 101, looking west. All finishes are deteriorated. (STRATA 2017)



Figure 4.337. Kitchen 101, looking north. All finishes are deteriorated. (STRATA 2017)



Figure 4.338. Kitchen 101, deteriorated floor inside door. (STRATA 2017)

Living Room 102

The living room is approximately 170 square feet, including the stair (Figures 4.339 – 4.344). The ceiling height is 7'-2 ½". The room is entered through from the kitchen to the north and also has a door to the Sitting Room 102 in the addition to the south. The stair to the second floor is along the east wall. The room is naturally lit with wood double-hung windows in the east wall and in the west wall. Window 102 in the west wall may be an original window location, while it is believed that Window 104 was added after the building was moved.

The stair to the second floor may date to the original ca. 1875 construction, but it is unknown at this time as this portion of the house is not well documented. The newel and railing appear to be a twentieth century addition, leading one to believe that the stair was constructed later, perhaps replacing a steeper, winding stair in this same location that served the basement, first, and second floors. Remnants of a strip of angled plaster on the wall beneath the stair (Figure 4.344) may indicate there was a different stair arrangement in this corner of the house at one time. The first floor framing seen in the basement also indicates there was once a tight and steep stair in this location. Based on the line in the plaster, the stair may have been reversed from its current configuration.

The existing stair to the second floor is in fair condition, with painted stringer, risers and treads, although the newel and a strip of the risers and stringers remain natural finish. The treads are covered with a very old and worn carpeting. The stairs appear to have originally been stained. The closet under the stairs has built-in shelving. The door is missing.

The casing from an old baseboard radiator is present in the northeast corner of the room. There are holes in the lath and plaster and brick walls and ceiling throughout the room. The paint is peeling. Wood grained linoleum flooring in this room contains asbestos.

A vertical crack in the south wall indicates where a historic window opening was once installed, likely prior to the brick house move. The existing Door 1/101 opening was installed when the south addition was constructed ca. 1908.



Figure 4.339. Living Room 102, looking south. (STRATA 2017)



Figure 4.340. Living Room 102, looking west. (STRATA 2017)



Figure 4.341. Living Room 102, looking north. (STRATA 2017)



Figure 4.342. Living Room 102, looking east. (STRATA 2017)



Figure 4.343. Living Room 102, detail of the three-wythe brick east exterior wall. This hole was made where a light switch was once installed. The gap between the inner layer and second layer of brick appears to be wide enough to have once had electrical wiring to the missing switch. (STRATA 2017)



Figure 4.344. Living Room 102, Detail under stairs looking east at the angled line in the plaster on the east wall. This line may indicate that an earlier winding staircase (rising in the opposite direction to the existing stair) may have been constructed here, which led to the first floor and the basement in the opposite direction from the existing stair. Only removal of further plaster and the staircase could help determine this, which is not recommended. (STRATA 2017)

Sitting Room 102

The south addition, constructed ca. 1908, contains a small sitting room with windows on three sides (Figures 4.345 – 4.348). This small space has never had a door installed, so it is assumed this was used as part of the first floor living space. The room is 92 square feet with a ceiling height of 7’-4”. The finishes in the room include lath and plaster and wood paneling, and all are deteriorated. The case from an old baseboard radiator runs along the east and west walls and the baseboards were cut to fit the casing. Vinyl tile flooring and mastic in this room contains asbestos.



Figure 4.345. Sitting Room 103, looking south. (STRATA 2017)



Figure 4.346. Sitting Room 103, looking west. (STRATA 2017)



Figure 4.347. Sitting Room 103, looking north. (STRATA 2017)



Figure 4.348. Sitting Room 103, looking east. (STRATA 2017)

Existing Conditions Interior – Second Floor

The second floor is approximately 506 gross square feet and is comprised of one large bedroom, a small office or bedroom, a full bathroom, and a walk-in closet. The second floor is accessed by the open stair to the first floor.

The interior layout of the house dates to the ca. 1904 renovation when the house was moved from its original location. All windows, doors, and trim within the house is painted and contains lead based paint. All of the interior painted surfaces are deteriorated and peeling.

Bedroom 200

Bedroom 200 is the largest room on the second floor (Figures 4.349 – 4.355). The space is approximately 224 square feet, including the staircase. The ceiling height is 7'-10". Walls are a combination of lath and plaster and plaster directly over brick. The plaster is in deteriorated condition and is cracked throughout the walls and ceilings. Holes in the ceiling are open to the attic above. The vinyl tile flooring contains asbestos.

The railing style is an earlier style than the railing and newel on the first floor stair. The second floor railing is very low and is in the Eastlake or Victorian style. It has been modified to fit this opening.

The room is naturally lit with four windows, which all are believed to be original to the ca. 1875 construction. The windows are in poor condition and require restoration. Sections of baseboard are missing along the west and east walls where baseboard radiators were once installed and have since been removed.

Concrete masonry unit blocks are laid against the west wall. These may have been placed here to counterbalance the previous 'lean' in the building before it was lifted and stabilized.

A chimney is located above the southwest corner of this room. This chimney is seen in photographs after the Brick House was moved to this location. It was removed by the 1970s when the building was re-roofed with red shingles. The chimney was reconstructed in the 1976 rehabilitation, based on the historic photographs, but the chimney footprint is believed to be too small in comparison to the photos. The chimney is supported in the attic by wood and steel framing. There is no physical evidence found on the interior of the west wall that this chimney was located here. It is possible this was a bracketed chimney, which would have been one built on some type of wood frame and supported separately from the exterior brick wall. This type of small chimney would have vented a stove flue. Removal of the flooring in this area might yield some clue as to its construction.



Figure 4.349. Bedroom 200, looking north. (STRATA 2017)



Figure 4.350. Bedroom 200, looking east. (STRATA 2017)



Figure 4.351. Bedroom 200, looking south. (STRATA 2017)



Figure 4.352. Bedroom 200, looking east. (STRATA 2017)



Figure 4.353. Bedroom 200, Detail stair railing. (STRATA 2017)



Figure 4.354. Bedroom 200, detail at stairs. (STRATA 2017)

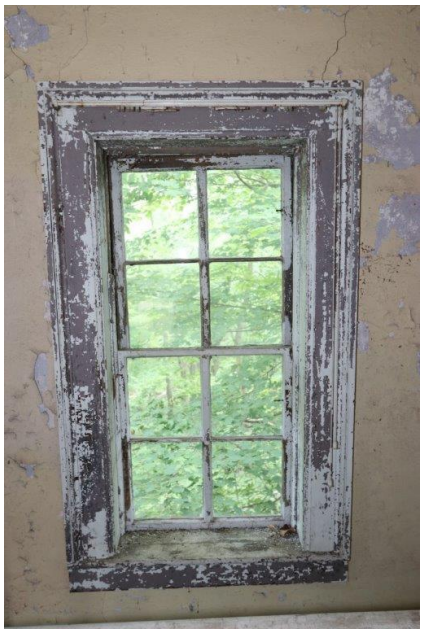


Figure 4.355. Bedroom 200, typical window. (STRATA 2017)

Bathroom 201 / Closet 201A

Bathroom 201 is located in the north section of the main part of the house (Figures 4.356 - 4.358). The space is approximately 48 square feet and includes a cast iron tub, a toilet, and a small wall-mounted sink. The ceiling height is 7'-10". Walls are a combination of lath and plaster and plaster directly over brick. Some sections of wall are also covered with a sheet of faux tiling that has been painted. The ceiling is lath and plaster. The plaster is in deteriorated condition and is cracked throughout the walls and ceilings and is covered in many layers of peeling paint. A wood-framed panel is installed in the ceiling for attic access. The tile flooring contains asbestos.

A chimney is offset from the exterior wall into the room. A thimble from an old stovepipe is visible. The remainder of the space between the shallow chimney and the closet to the east is wood wall board infill. The soil stack vent is located in the northwest corner of the room.

The room is naturally lit with a 4/4 window, which may be original to the ca. 1875 construction. The window is in poor condition and requires restoration. Sections of baseboard are missing.

Closet 201A is 20 square feet and is accessed from Door 2/201 on the east side of the bathroom (Figures 4.359 – 4.360). The door is missing. There is some built-in shelving in this space. This closet was once the entry vestibule for the second floor studio when it was in its original location. An entry door for the second floor from the Main House second floor porch was once installed in the north wall of the existing closet space. Another door was installed in the south wall of the closet.



Figure 4.356. Bathroom 201, looking west. (STRATA 2017)



Figure 4.357. Bathroom 201, looking north. (STRATA 2017)



Figure 4.358. Room 201, looking east towards the Closet. (STRATA 2017)



Figure 4.359. Closet 201A, looking east. (STRATA 2017)



Figure 4.360. Closet 201A, looking south. Note, the outline of the infilled door can be seen in the paper and plaster. (STRATA 2017)

Room 202

The second floor of the south addition contains a small office or bedroom with windows on three sides (Figures 4.361 – 4.364). This small space has never had a door installed, so it is assumed this was used as part of the second floor bedroom space. The room is 92 square feet with a ceiling height of 7'-10". The finishes in the room include lath and plaster walls and ceiling, which is deteriorated and damaged throughout the room. The case from an old baseboard radiator runs along the south wall and the baseboard was cut to fit the casing. Tile flooring and mastic in this room contains asbestos.

Windows are all 2/2 wood double-hung and are in deteriorated condition. The exterior wood wall framing is visible through a hole in the northeast corner of the room.



Figure 4.361. Room 202, looking northeast. (STRATA 2017)



Figure 4.362. Room 202, Hole in east wall. (STRATA 2017)



Figure 4.363. Room 202, looking south. (STRATA 2017)



Figure 4.364. Room 202, looking west. (STRATA 2017)

Attic

The attic is accessed through the panel in the ceiling in the second floor bathroom. The attic is open and is fairly clean. The roof rafters, most of which are believed to have been replaced in 1976, are visible. The reconstructed chimney is visible in the southwest section of the main part of the roof. The attic over the south addition is accessed through a hole in the south gable wall. The north chimney is visible in the attic space, which has several deteriorated and broken bricks that require replacement. The plumbing vent pipe is cut below the roof in the northwest corner.

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Figure 4.365. Attic, looking south. (STRATA 2017



Figure 4.366. Attic, looking south. (STRATA 2017)



Figure 4.367. Attic, Detail of chimney. (STRATA 2017)



Figure 4.368. Attic, Detail of plumbing vent at northwest corner. (STRATA 2017)

Existing Conditions (Summer 2017):

Exterior

- Overall spot repointing required for the exterior masonry. Some cracks forming to be monitored. There are many campaigns of mortar repointing, which are inconsistent in color and hardness. Brick patching at the needle holes for lifting the house are very apparent and the bricks were not always toothed into the surrounding bricks for the repairs.
- There is some bulging of the brick on the south foundation wall.
- Brick chimneys are deteriorating. Some bricks are flaking, and they have mortar loss.
- The roof is in fair condition, with some broken or missing shingles. The roof underlayment contains asbestos.
- Brick is dirty.
- The foundation vents on the north side of the house are not original to the house and are in poor condition.
- Sealant joint between addition and brick house is in good condition.
- Front wood steps have no handrail.
- All windows are deteriorated. The front door jamb and door are deteriorated. The front door is not weatherstripped and there is no offset in the threshold, which allows water under the door and into the building.
- The cast stone sill at the west basement window is cracked.
- Exterior trim all dates to the 1976 rehabilitation. There are sections that require replacement due to deterioration, woodpecker, or insect damage.
- A slight swale on the west side of the building directs water away from the foundation.
- The building has been stabilized on at least two occasions and appears to be stable.

Interior

- The interior historic finishes include: lath and plaster walls, plastered walls over masonry, trim, and wood flooring. All plaster is in poor condition. Paint is peeling throughout the interior on all surfaces.
- All painted surfaces in the house contain lead based paint.
- Almost all interior flooring tile and mastic contain asbestos.
- Skim coating on the plaster in the kitchen contain asbestos. Further testing is required to ensure no other patches in the house contain asbestos.
- There are no current utility services active in the building.
- The stairs likely date to the ca. 1904 renovation. The newel and railing on the first floor appear to be from a later renovation, while the railing on the second floor may be earlier.

Building Code, Life Safety, and ADA Existing Conditions

The Brick House HS-19 is currently unoccupied.

Former Use – Residence – 'R' Occupancy
Type VB Construction, Un-sprinklered

Square Footage

First Floor	400 sf
Second Floor	400 sf
Total	800 sf

Occupant load for the building, per IBC – 800 sf / 200 sf = 4 persons

There is currently no smoke or fire alarm, nor are there exit signs or emergency lighting.

There is no fire extinguisher.

The building is not ADA accessible. There is no accessible route to the building, nor is there an accessible landing. The first floor is raised above grade with steps at the front entry. ADA accessibility is not provided from the first floor to the second floor, nor to the basement. Door widths within the building do not meet ADA clearance requirements.

Conclusion

The Brick House HS-19 is stable and is in fair to good overall condition, requiring maintenance typical for a brick structure that has been moved and stabilized at least twice. In order for the building to be used, the interior must be abated of LBP and ACM, the interior completely rehabilitated, and new utilities brought to the building. The building is also not currently ADA accessible due to the elevation of the first floor above grade. Due to the building's small footprint, it would be difficult to accommodate ADA accessibility to all three floors.

Brick House (HS-19) Existing Conditions – Structural

The Brick House is a two-story structure that has a gable roof and is located just to the southeast of the Main House. The house was reportedly constructed around 1875, adjacent to the east side of the Main House. It was reportedly moved to its current site in 1904. There is a full height addition on the south side of the house, with a hip roof, reportedly constructed in 1908 (Figure 4.369).



Figure 4.369. West elevation, Brick House. (SEA 2017)

Foundation

There was significant work for the Brick House foundation shown in the 1975 drawings, including the west wall. In 2010 a significant portion of the foundation was replaced with concrete masonry units (CMU). The basement walls are constructed of red brick masonry over CMU. The height of the CMU varies. At the west basement wall, the CMU rises as high as the first floor framing. On other walls the CMU goes to mid height or lower and continues up in red brick. The CMU is mostly covered in a cementitious parge coat.

The brick masonry walls have visibly been repaired or altered in several places. This is evidenced by the variation of brick types and coursework. There are cracks and signs of movement, but it is unknown if these indicate active movement or if they existed prior to the foundation replacement. A crack monitor is adhered to the wall in the south portion of the basement. The date of installation and initial readings for the monitor are unknown. However,

apparent movement of less than 1-millimeter and slight rotation south has taken place since installation. Even a small rotation at the basement level can translate to significant displacement in upper levels of a structure (Figure 4.370).



Figure 4.370. Crack monitor in basement. (SEA 2017)

An interior double wythe brick wall bisects the basement running north-south. This wall is structural and supports the midspan of the first floor framing joists. Another interior wall at the connection to the house addition is triple wythe brick. This wall was originally on the exterior but is now enclosed by the addition. There is a doorway through the triple wythe wall. Here the wall has a collar joint approximately 1-inch wide (Figure 4.371).



Figure 4.371. Interior basement wall as seen in doorway, Brick House. (STRATA 2017)

First Floor Framing

The joists for the northern portion of the Brick House are 2-inch by 10-inch (actual dimensions) white pine spaced at 16-inches on center, spanning east-west. The joists are pocketed into the exterior walls and supported at midspan by the central brick wall. The joists are continuous over the wall. There is some deterioration of the joists, especially below the house entrance near the northwest corner of the house (Figure 4.372). Seven joists here have been sistered with 3-foot long members. The flooring above exhibits significant wood rot and deterioration, creating an unsafe condition. There is also deterioration near the ends of several other joists.



Figure 4.372. Joists below house entrance. (SEA 2017)

The joists in the southern addition of the Brick House are 1 ½-inch by 7 ½-inch eastern hemlock spaced at 16-inches on center, spanning east-west. The joists have pin holes indicating insect damage. Two joists at the window do not have adequate bearing. Another joist is missing section at its bearing location (Figure 4.373).



Figure 4.373. Joist bearing condition in south portion, looking west. (SEA 2017)

Second Floor Framing

The joists are visible overhead in the kitchen where some of the plaster is removed. The joists are 2-inch by 9 ¾-inch spaced at 16-inches on center, running east-west. No samples were taken, however the material is likely the same as the first floor framing directly below (white pine).

In the addition room on the south end of the Brick House the joists are not exposed. Based on the direction of lath, the joists span east-west. They are likely similar in size, spacing, and type as the first floor framing for the addition.

The second floor framing joists are likely pocketed into the exterior brick masonry just as the first floor framing joists are. This construction can result in rot due to moisture where the joists sit in the wall. The condition of the second floor framing joists cannot be determined without further investigation.

Roof Framing

The attic is entered through an access hatch in the ceiling of the second floor bathroom. The ceiling joists are 2-inch by 6-inch, spaced at 16-inches on center, east-west. The joists are pocketed into the top of the brick walls (Figure 4.374).



Figure 4.374. Joists in attic. (SEA 2017)

The roof rafters are spaced at 24-inches on center and vary widely in size, from 2-inch by 3 ½-inch to 2-inch by 8-inch. They are connected to a sill plate which is in turn connected to the joists. It is unclear whether the ceiling joists are tied down to the masonry or if they are held in place by gravity. There is no ridge beam for the roof (Figure 4.375).



Figure 4.375. Roof rafters and sheathing. (SEA 2017)

Sizes of the sheathing members also varies from 7 ¾-inches wide to 12 ½-inches wide.

The addition on the south has a hip roof. The joists are 1 ⅝-inch by 5 ⅝-inch spaced at 16-inches on center. The roof rafters are all 1 ¾-inch by 3 ¾-inches spaced at 2-feet on center. There is no visible connection for the roof members or joists to the sill plate and the connection for the sill plate to the exterior masonry wall is undetermined (Figure 4.376).



Figure 4.376. Joists in attic. (SEA 2017)

The presence of walnuts indicates previous animal infestation in the attic space.

Exterior Walls

The north portion of the brick house is constructed of triple wythe brick, measuring approximately 15 to 15 ½-inches thick. At the gable ends of the roof, above the third floor ceiling, the brick transitions to double wythe.

The exterior wythe does not have a regular pattern of header brick visible from the exterior, with the exception of a single vertical line of headers on both the east and west elevations. Header bricks or ties would connect the exterior wythe to the rest of the wall. The absence of ties could be a concern. At a hole into the interior brick in the living room, it appears that diagonal headers may have been used to tie the exterior wythe to the rest of the wall, creating a hidden bond (Figure 4.377).



Figure 4.377. Diagonal brick in center wythe, east wall. (SEA 2017)

On the exterior, there are some cracks in the brick. The cracks are mostly vertical and near the windows. On the north elevation, there are no lintels over the basement openings. There is also some cracking there.

The north chimney of the Brick House is incorporated into the wall. The other chimney is not; it is purely architectural with no fireplace. The visible portion of the chimney above the roofline is supported by a steel frame in the attic space.

The upper two floors of the south addition are wood balloon-framed with brick and concrete block veneer. The lower level is brick, while quoins and upper level are concrete block. The windows on the addition have concrete sills and lintels.

On the south elevation the exterior brick wall bulges outward below the first level windows (Figure 4.378).



Figure 4.378. Area of bulging on south wall. (SEA 2017)

The quoins on the southeast corner have large mortar joints, indicating repointing work performed following movement. Cracks in the repointed mortar joints indicate southern movement of the south wall since the previous repairs (Figure 4.379). This movement is consistent with the bulging of the south wall and the movement documented by the crack monitor in the basement.

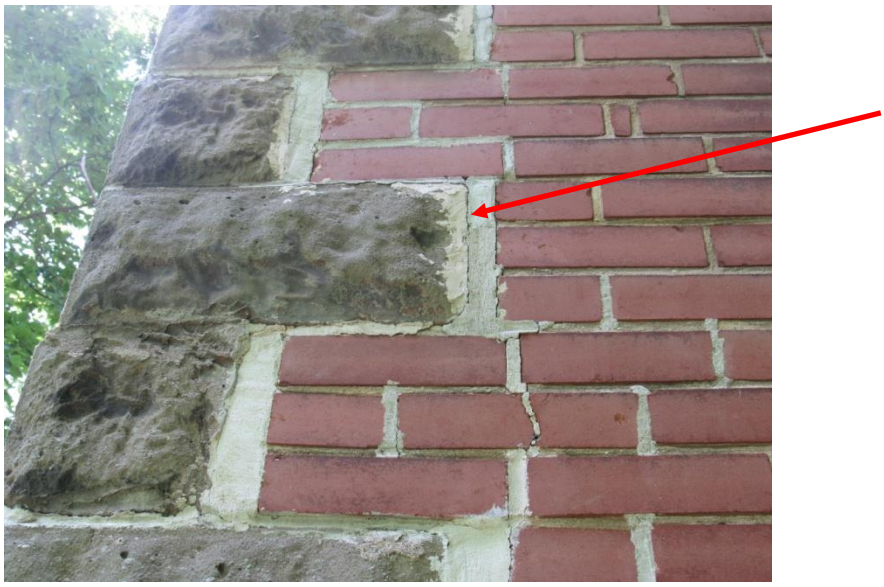


Figure 4.379. Open joints at southeast corner of house, east elevation. (SEA 2017)

The east joint between the addition and the original house increases in width moving up the structure. The sealant in the joint appears to be holding (Figure 4.380).



Figure 4.380. Exterior sealant joint. (SEA 2017)

Brick House (HS-19) Existing Conditions – Mechanical and Electrical

Introduction - Brick House (HS-19)

Henderson Engineers conducted a site visit on June 12th through 14th of 2017. There are no existing utility services to the building as the building was relocated in the past and all utility connections were disconnected at that time, therefore none of the MEP systems described below are operational.

The 2015 International Building Codes, including 2015 International Fire Code, 2015 International Plumbing Code, 2015 International Mechanical Code, 2015 International Fuel Gas Code, and the 2014 National Electrical Code (NEC) were used for the evaluation of the MEP systems.

Mechanical Systems

There is no existing central heating or cooling system installed to serve the house.

There is evidence of previously removed baseboard heaters located at the base of select walls throughout the first and second floors (Figure 4.381).



Figure 4.381. Previously removed baseboard heater. (HEI 2017)

There are no other signs of previous mechanical systems in the house. Earlier heating systems for this house included stove heating. Remnants of the stove pipe locations in the north chimney and the truncated chimney along the west wall would have been used for these flues.

Electrical Systems

The old main electrical service enters through the north wall at the northwest corner of the basement through a 2-inch conduit (Figure 4.382). There is no existing waterproofing material around the conduit at the wall penetration.



Figure 4.382. Abandoned electrical service entrance. (HEI 2017)

The existing feeders presumably fed an existing load center that was previously removed and discarded during a previous foundation replacement project (Figure 4.383).



Figure 4.383. Abandoned electrical load center. (HEI 2017)

There are existing porcelain lamp sockets in the basement that are connected by EMT conduit and wiring (Figure 4.384).



Figure 4.384. Attached porcelain lamp sockets and conduit. (HEI 2017)

Some lamp sockets and conduits in the basement have been detached from the structure (Figure 4.385).



Figure 4.385. Detached porcelain lamp sockets and conduit. (HEI 2017)

There is an existing light switch just inside the entry to the basement, mounted to the beams above (Figure 4.386). There are also two existing GFCI duplex receptacles in this space, also mounted to the beams above (Figure 4.387).





Figures 4.386 and 4.387. Light switch and receptacles in basement. (HEI 2017)

Existing back boxes and wall openings are located throughout the first and second floor spaces that previously contained receptacles and light switches. Many of the back boxes have MC cable stubbed to them, but wire is only present at a couple of locations (Figures 4.388 and 4.389).





Figures 4.388 and 4.389. Existing receptacle back boxes. (HEI 2017)

A few of the back boxes still have devices attached to them, however they are in poor condition (Figures 4.390 and 4.391).





Figures 4.390 and 4.391. Existing devices on first and second floors. (HEI 2017)

Existing junction boxes, recessed in the ceilings, are located throughout the first and second floor spaces. These junction boxes previously contained light fixtures and/or lamp holders. The junction boxes have MC cable stubbed to them, but wire is only present at one location (Figures 4.392 and 4.393).





Figures 4.392 and 4.393. Existing ceiling junction boxes. (HEI 2017)

There are existing junction boxes and conduit located in the attic, fed from the second floor below (Figure 4.394).

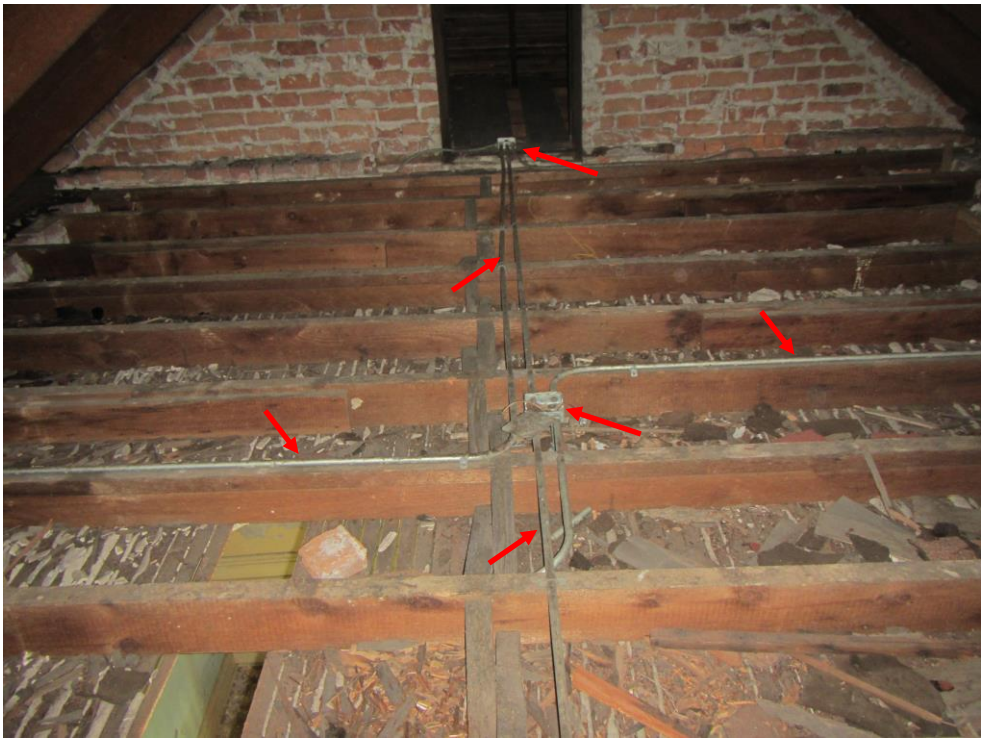


Figure 4.394. Existing junction boxes and conduit in attic. (HEI 2017)

There is no evidence of an existing intrusion detection system in the brick house, however there is a security system panel in the basement of the main house that previously fed the brick house.

Plumbing Systems

The existing 4-inch main sanitary line enters the basement from the floor above in the northwest corner of the house (Figure 4.395). The existing ½-inch gas line also penetrates through the floor from the first floor above in this same location (Figure 4.395). Both the sanitary and the gas pipes have been severed, just below the first floor, so the earlier locations of the gas entry and sanitary exit into and out of the building are unknown.



Figure 4.395. Main sanitary and gas lines to first floor. (HEI 2017)

The kitchen on the first floor has a plumbing chase in the northwest corner of the room. The gas line from the basement routes in the chase up to above the first floor ceiling with a gas cock up near the ceiling (Figure 4.396). The waste and vent line from the basement routes up in the chase up through the restroom above and into the attic (Figures 4.396 and 4.397). A 2-inch sanitary pipe that previously serviced the kitchen ties into the 4-inch stack near the floor within the chase (Figure 4.397).





Figure 4.396 and 4.397. Waste/vent and gas pipes in first floor kitchen chase. (HEI 2017)

The bathroom on the second floor has an existing bathtub (Figure 4.398), a floor mounted water closet (Figure 4.399), and a wall hung lavatory (Figure 4.400). All are in poor condition.



Figure 4.398. Existing bathtub in second floor restroom. (HEI 2017)





Figures 4.399 and 4.400. Existing water closet and lavatory in second floor restroom. (HEI 2017)

The sanitary and domestic hot and cold water lines serving the bathtub are stubbed up through the floor just west of the bathtub (Figure 4.401).



Figure 4.401. Water and sanitary lines for bathtub. (HEI 2017)

Existing vent lines extend up into the attic from the second floor and the first floor below and tie together in the northwest corner (Figure 4.402). At one time, the vent would have exited through the roof, but a previous renovation terminated the vent below the roof.



Figure 4.402. Sanitary vent lines in attic. (HEI 2017)

Fire Protection Systems

There are no existing fire protection systems in the Brick House.

Brick House HS-19 Significant Character Defining Features

Care should be taken to preserve the following significant historic features with routine maintenance and through future rehabilitation projects.

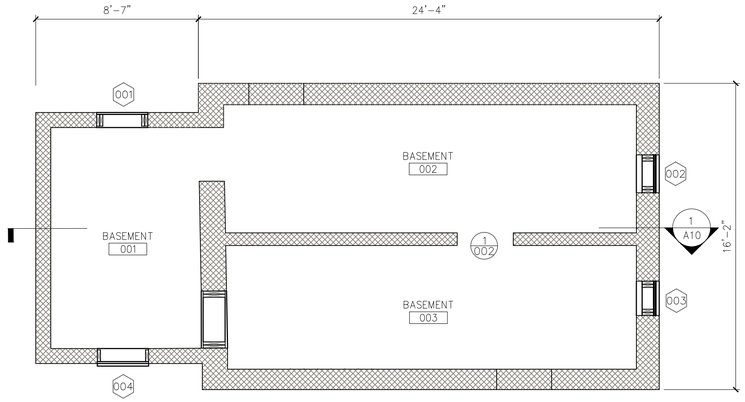
Exterior:

- Massing – Set into grade with exposed brick foundation. Two-story with a gable roof. South addition with hipped roof.
- Basic Footprint – Rectangular.
- Multi-wythe Masonry Walls (Main House) and Cast Stone and Brick Veneer over Wood Frame (Addition)
- Door and Window Placement - Original window sashes remain. Entry door and one window from ca. 1904 renovation (within period of significance)
- Roof – Gable and hipped roofs.
- Chimneys – Reconstructed chimney in center of north gable and reconstructed chimney is southwest corner of main roof, although reconstructed chimneys may not be the correct historic size. More study would be required to determine this.

Interior:

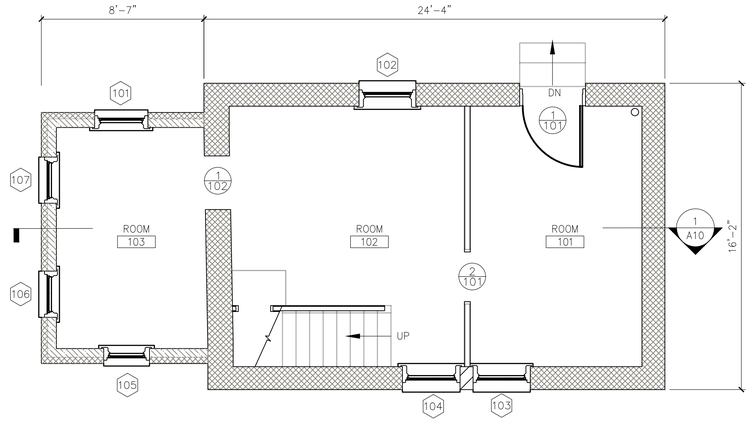
- Interior Room Arrangement ca. 1904 – One room per floor.
- Wood staircase.
- Interior trim.
- Plaster walls.

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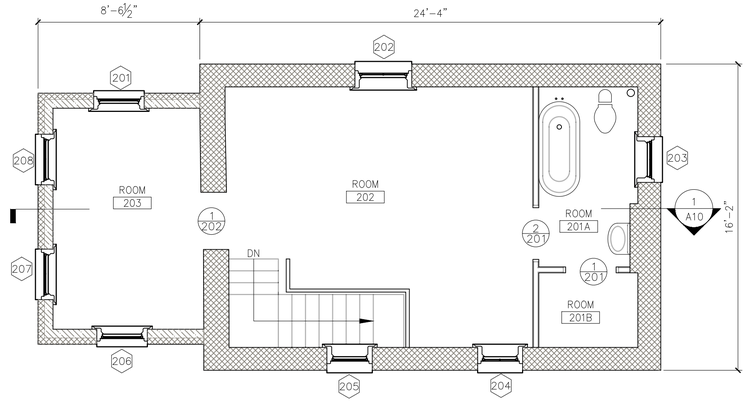
1 A08 EXISTING BASEMENT PLAN
1/4" = 1'-0"

PROJECT NORTH



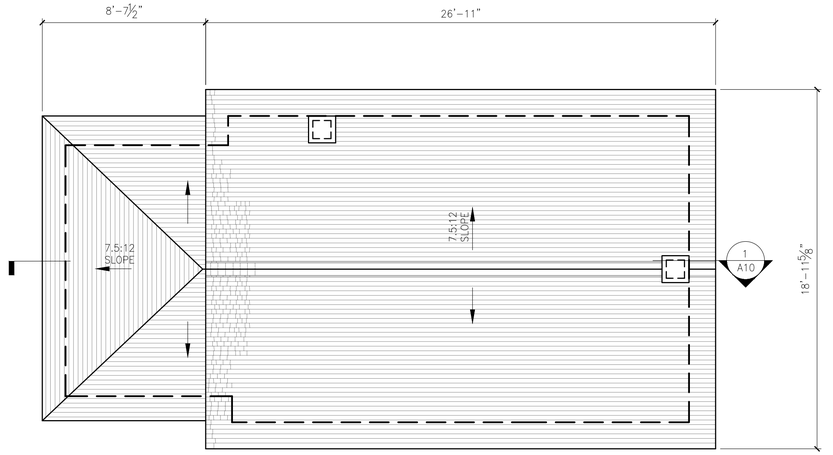
2 A08 EXISTING FIRST FLOOR PLAN
1/4" = 1'-0"

PROJECT NORTH



3 A08 EXISTING SECOND FLOOR PLAN
1/4" = 1'-0"

PROJECT NORTH



4 A08 EXISTING ROOF PLAN
1/4" = 1'-0"

PROJECT NORTH

4 0 4 8
SCALE OF FEET

KEY	
#	DRAWING KEY NOTES
000	WINDOW NUMBER
000	DOOR NUMBER
000	ROOM NUMBER
	BRICK/STONE WALL
	LOG WALL
	WOOD FRAME WALL

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DRAWN: CA
TECH. REVIEW: AG
DATE: 05/07/18

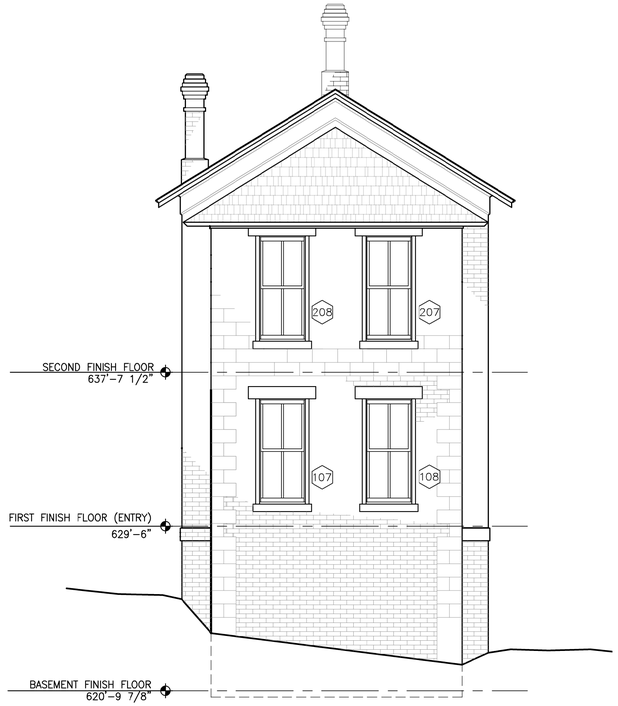
SUB SHEET NO. A08

TITLE OF SHEET
EXISTING CONDITION DRAWINGS
HS-19
BRICK HOUSE
BAILLY HOMESTEAD
INDIANA DUNES NATIONAL LAKESHORE
PORTER, INDIANA

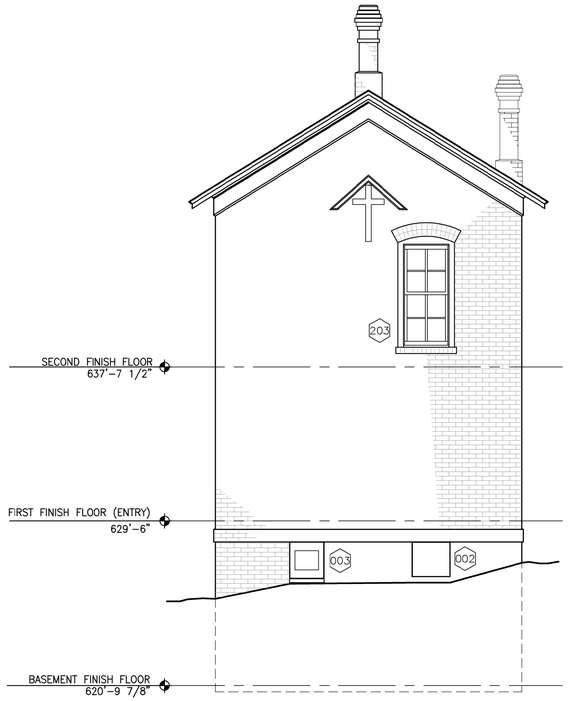
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SHEET 9 OF 24



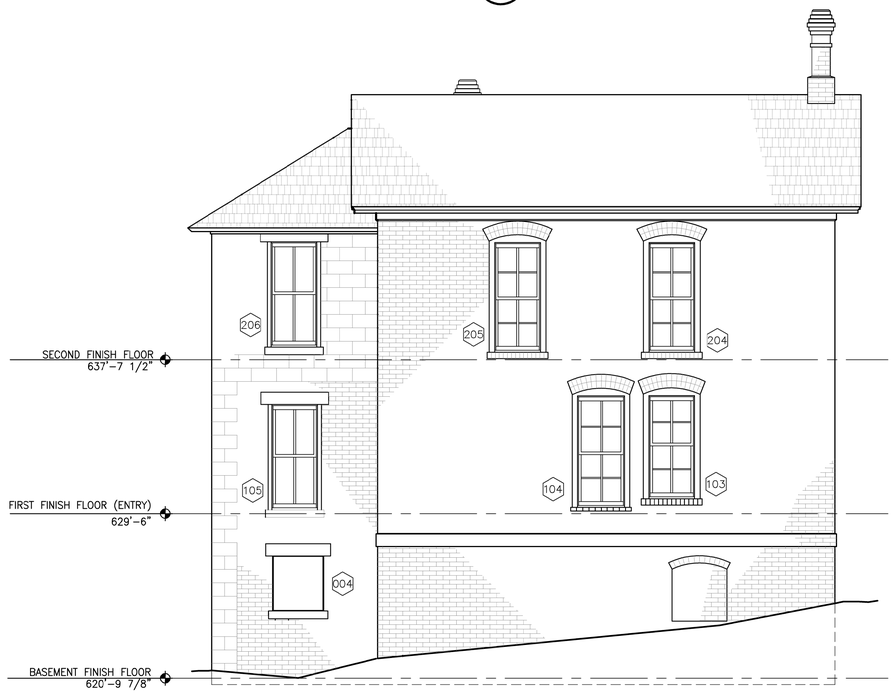
1 A09 EXISTING WEST ELEVATION
1/4" = 1'-0"



2 A09 EXISTING SOUTH ELEVATION
1/4" = 1'-0"



3 A09 EXISTING NORTH ELEVATION
1/4" = 1'-0"



4 A09 EXISTING EAST ELEVATION
1/4" = 1'-0"

KEY	
(#)	DRAWING KEY NOTES
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000 / 0	DOOR NUMBER
000	ROOM NUMBER

4 0 4 8
SCALE OF FEET

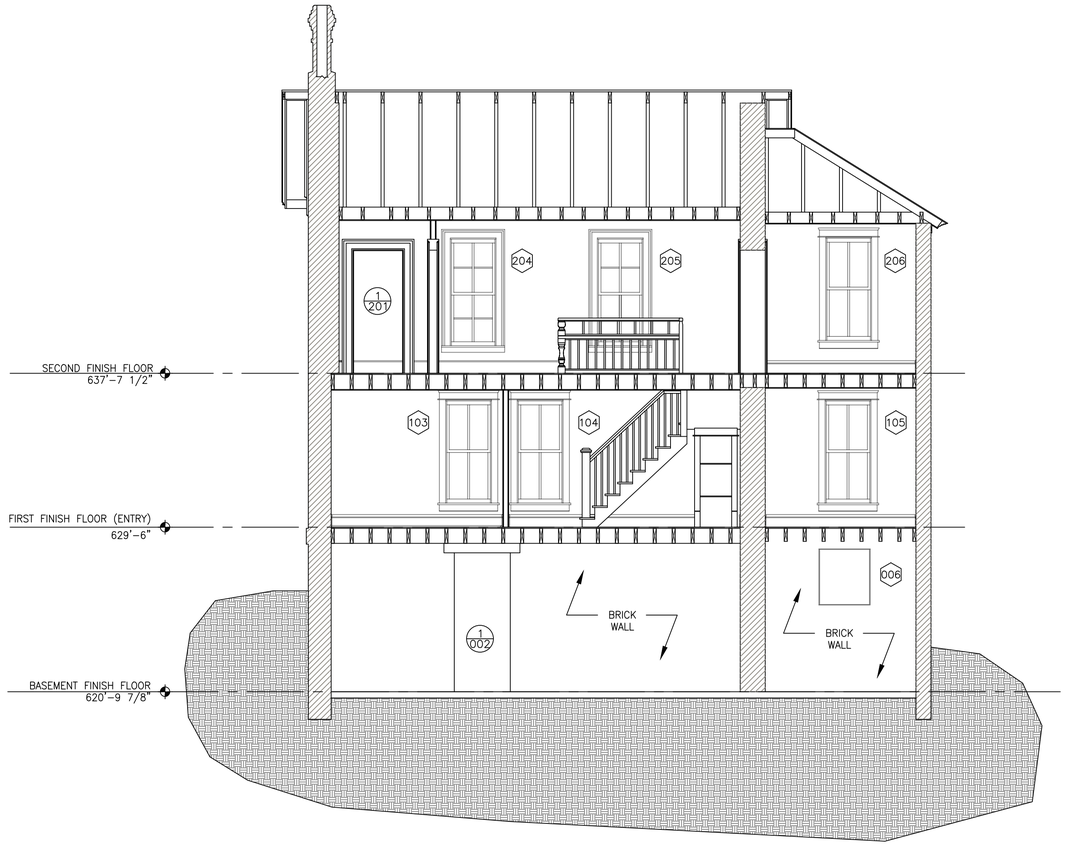
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TECH. REVIEW: AG
DATE: 05/07/18

SUB SHEET NO. A09

TITLE OF SHEET
EXISTING CONDITION DRAWINGS
HS-19
BRICK HOUSE
BAILLY HOMESTEAD
INDIANA DUNES NATIONAL LAKESHORE
PORTER, INDIANA

DRAWING NO. 626 / 138616
PMIS/PKG NO. 20940
SHEET 10 OF 24



1 / A10 EXISTING BUILDING SECTION
1/4" = 1'-0"

KEY	
#	DRAWING KEY NOTES
000	WINDOW NUMBER
000 / 0	DOOR NUMBER
000	ROOM NUMBER

4 0 4 8
SCALE OF FEET

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SUB SHEET NO. A10

TITLE OF SHEET
EXISTING CONDITION DRAWINGS
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SHEET 11 OF 24



Two-Story Log House, view looking northeast. (STRATA 2017)

4 EXISTING CONDITIONS
TWO-STORY LOG HOUSE

Two-Story Log House (HS-20) Existing Conditions – Architectural

Existing plans and elevations of the Two-Story Log House can be found following this narrative. Required repairs and proposed treatments (narrative and drawings) can be found in the Chapter 6 Treatment Recommendations section of this report.



Figure 4.403. View of HS-20 Two-Story Log House, North and east elevations. (STRATA 2017)

The Two-Story Log House (HS-20) is located north of the Main House and the Chapel and backs up to the ravine.

There are many accounts of the building's origin and use through the years – many of which are unable to be confirmed. The vernacular log building consists of a brick and concrete foundation and a two-story, basically square, horizontal log structure. The house was completely dismantled and reconstructed by the NPS in 1976, utilizing some historic and some replacement logs. The foundation dates to this construction.

The footprint of the building is 203 square feet. The plan is essentially 14'-1 1/2" (north/south) and 14'-5" (east/west) in overall dimensions. The first floor walls are full-height log walls, while the second floor log walls are half-height. The roof is gabled, with a small dormer pediment where a second floor door exits the south wall. The main entry faces west and is centered in the gable. Two 4/4 windows exist on the south and east elevations at the first floor, and two four-lite casement windows are centered in the west and east gables at the second floor level. A brick masonry chimney is located just off center to the south, along the west wall.

The foundation is vented on the south and north elevations. The first floor is framed with traditional 2x joists. Reproduction hewn timber joists support the second floor. The roof is supported by a single historic log pole rafter and modern 2x4 roof framing and collar ties. The 1x6 wood skipped sheathing is topped with a white asbestos roofing underlayment. The white underlayment is very noticeable between the roof skipped sheathing from the interior of the building. The building is topped with a wood shingle roof and has no gutters.

Logs are fastened at the corners through use of a variety of saddle notches and V-notches (Figure 4.1). Many of the logs on the building are marked with Roman numerals (Figure 4.408). It is unknown if these are logs from another structure that were salvaged and used during the 1976 reconstruction, or if the marks may have been made at that time. They do not appear to be in any specific order. The flat surface of the logs on the interior aided in finishing the interior. Vertical notches in the interior wood logs indicate there were once wood nailers for the interior wall finishes. The interior was originally lathed and plastered. Logs are currently exposed on the exterior and on the interior and are chinked with metal lath and daubed with a Portland cement-based material. Trunnels are visible on the interior of the building, which provide some stability to the log walls.

Eaves are finished boards and overhang the gable and sides of the building. The window sashes are painted, but are deteriorated. The wood door and trim are unfinished wood and date to the 1976 reconstruction. The front door is secured by a cylindrical lock.

There is no ADA access into the building, as there is a stone stoop and a step up to finished floor at the front entry.



Figure 4.404. View of HS-20 Two-Story Log House, West elevation. (STRATA 2017)



Figure 4.405. View of HS-20 Two-Story Log House, North elevation. (STRATA 2017)



Figure 4.406. View of HS-20 Two-Story Log House, East elevation. (STRATA 2017)

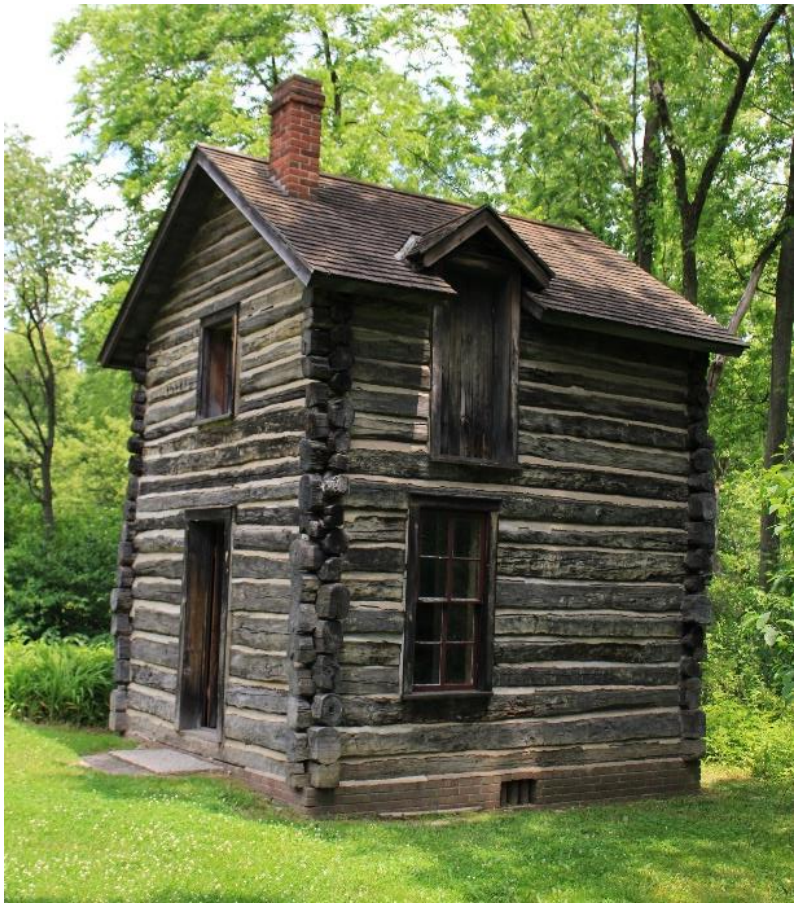


Figure 4.407. View of HS-20 Two-Story Log House, South elevation. (Sheals 2017)



Figure 4.408. View of HS-20 Two-Story Log House, Roman numeral markings on the exterior of the logs. (Sheals 2017)

The Two-Story Log House is currently not in occupiable condition on the interior. The interior finishes were removed during the 1976 rehabilitation for the reconstruction, with only the stair wall and the bracketed chimney cabinet reinstalled. Originally, the interior surfaces of the log walls were plastered, as was the underside of the second floor structure and the roof rafters (Figures 2.102 and 2.103).

The interior is comprised of two rooms, one per floor. Wood floors on the interior are 5 ½" tongue and groove pine flooring. This is material that may have been installed in the 1976 reconstruction. The doors and all exterior trim are also ca.1976 or later. The log walls and wood frame roof structure are visible throughout the interior, including the second floor hewn joist beams. These beams (seen in Figure 4.409) are very rough and are a poor representation of a historic hewn beam finish. The building is uninsulated.

The existing wood winding staircase is located along the south wall in the southeast corner of the building. The staircase and wall appear be original to the ca. 1900 construction of the building. The north wall of the staircase is sheathed with vertical rail car siding. The door and trim to the closet under the stairs also appears to be original (Figure 4.410). A stair handrail was added in a previous renovation.

The bracketed masonry chimney was reconstructed on the west wall during the 1976 reconstruction and is now supported by steel angles to supplement the original wood cabinet. There is no longer a railing at the second floor stair opening.

This building was not tested for hazardous materials as part of this study. It should be assumed, until further testing is completed, that all painted surfaces contain lead, and that the exposed roof underlayment contains asbestos, as is consistent with other buildings on the site.



Figure 4.409. View of HS-20 Two-Story Log House, First floor, looking east. (STRATA 2017)



Figure 4.410. View of HS-20 Two-Story Log House, First floor, looking south. (STRATA 2017)



Figure 4.411. View of HS-20 Two-Story Log House, First floor, looking west at entry. (STRATA 2017)



Figure 4.412. View of HS-20 Two-Story Log House, First floor, looking north. (STRATA 2017)



Figure 4.413. View of HS-20 Two-Story Log House, First floor, looking east up staircase. (STRATA 2017)



Figure 4.414. View of HS-20 Two-Story Log House, First floor closet under stairs. (STRATA 2017)



Figure 4.415. View of HS-20 Two-Story Log House, Second floor, looking southeast. (STRATA 2017)



Figure 4.416. View of HS-20 Two-Story Log House, Second floor, looking south. (STRATA 2017)



Figure 4.417. View of HS-20 Two-Story Log House, Second floor, looking west. (STRATA 2017)



Figure 4.418. View of HS-20 Two-Story Log House, Second floor bracketed chimney. Original wood cabinet below. Note the steel angles were added in 1976 during the chimney reconstruction. (STRATA 2017)



Figure 4.419. View of HS-20 Two-Story Log House, Second floor, looking west at roof rafters. Note there is one original pair of pole rafters and one original collar tie. (STRATA 2017)

Existing Conditions (Summer 2017):

Exterior

- Wood roofing shingles are in fair condition. There is some moss growing on the north side of the roof.
- No gutters or roof drainage at this time.
- The condition of the chimney cap was unable to be assessed.
- Overall log weathering. The last known sealant installation was in 2004.
- Some older logs show signs of previous insect infestation. Active carpenter ants were visible swarming the exterior southwest corner of the building. They were flying in and out of one of the exposed ends of the logs.
- Saddle notches overcut, exposing a large gap between the top log and the outer log crown. Exposing this sky-ward facing joint, the joint surface can hold water and snow and increase deterioration. This is partially due to replacing deteriorated squared logs with round telephone poles. They do not necessarily fit together snugly (Figure 4.423).
- Daubing/parging wash is loose and missing along most of the north foundation wall/sill log joint. It is also loose and cracked along the south, east, and west walls.
- Checks in the top portion of logs can allow water to collect and further log deterioration.
- Portland cement-based daubing is cracked, loose, or missing throughout the exterior. In a few locations, a newer, thinner layer of daubing material is layered over an older daubing, and they were not well bonded and are separating, with the top layer flaking off. Portland cement daubing is not typically recommended for log structures, as the Portland is very hard and does not breathe. Refer to the Chinking and Daubing section at the beginning of Chapter 4 for more information on the Portland daubing material usage. There are sections of replacement mortar that do not match the 1970s mortar.
- Animals have been chewing on the upper logs at the southwest corner.
- Deteriorated exterior trim is visible on all sides of the south dormer. There appears to be some woodpecker damage, as well.
- Exposed raw wood at door, door jamb, and door trim. The front door threshold is broken.
- Deteriorated window sashes. The two double-hung and two casement windows in the house require restoration, including new putty and hardware restoration and replacement.
- Deteriorated trim and broken drip cap at the east, first floor Window 100.
- Replacement brick foundation is in good condition, requiring spot repointing.
- Soil along north wall is above the bottom of the foundation vent. Recommended clearance would be four inches.
- Foundation is soiled from splashing of dirt due to lack of gutters.
- No foundation crawl space access. Only visibility is through the vents.
- Mud dauber nests are attached to the underside of the north soffit.
- Mortar loose at wall area surrounding north foundation vent.
- Hazardous Material: the roof contains asbestos underlayment.

- The Sentricon System that was installed for termite monitoring was supposed to be removed several years ago. The green plastic units are still located in grade surrounding the building. These are no longer functioning or monitored.
- No ADA Access into building.



Figure 4.420. View of HS-20 Two-Story Log House, View of deteriorated joint filler material and old insect infestation damage at end grain of logs. (STRATA2017)

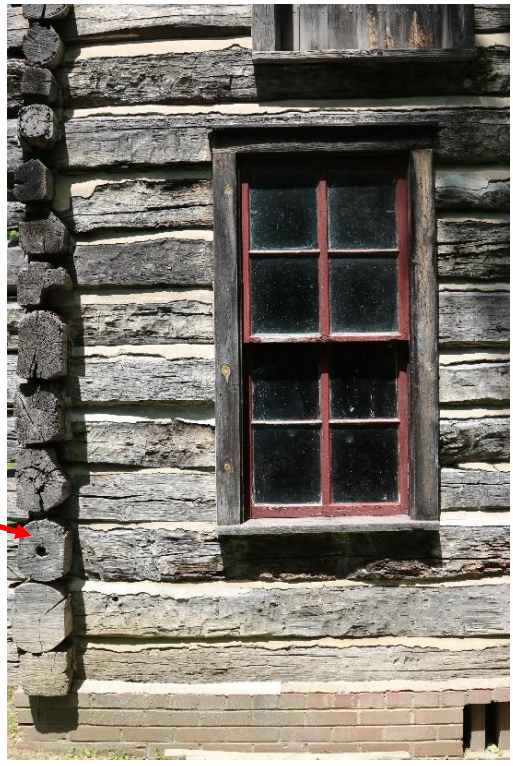


Figure 4.421. Two-Story Log House, Deteriorated window sashes at south first floor Window 101. The red arrow points to the location of the active carpenter ant swarming. (STRATA2017)



Figure 4.422. View of HS-20 Two-Story Log House, East elevation. Note that daubing is missing between the logs and the window trim. A Sentricon unit is located in grade. (STRATA 2017)



Figure 4.423. View of HS-20 Two-Story Log House, Northeast corner where saddle notches are overcut. This is due to the old square logs not matching with the new round logs. This exposes the skyward-facing to moisture and increased opportunity for deterioration. (STRATA 2017)

Interior

- The interior historic finishes have all been removed, except for the stairs, the stair wall, the door in the stair wall, and the bracketed chimney cabinet.
- Wood flooring and trim throughout appears to all date to the 1976 reconstruction.
- There is no railing at the second floor stair opening.
- There is no guard railing outside the second floor door opening.
- Hazardous materials testing was not done for this building, but it should be assumed that all painted surfaces contain lead (trim, flooring, door, and window sashes). The deteriorated stair tread covering was not tested for asbestos.
- There are no current utility services active in the building.
- Condition of alarm system unknown but is likely not in working condition.

Building Code, Life Safety, and ADA Existing Conditions

The Two-Story Log House HS-20 is currently unoccupied.

Former Use – Residence – 'R' Occupancy

Square Footage

First Floor	137 sf
Second Floor	138 sf
Total	275 sf

Occupant load for the building, per IBC – 275 sf / 200 sf = 1.4 persons

There is currently no smoke or fire alarm, nor are there exit signs or emergency lighting. There is not one required, due to the Occupancy and low Occupant Load.

There is no fire extinguisher.

The building is not ADA accessible. There is no accessible route to the building, nor is there an accessible landing.

Conclusion

The Two-Story Log House HS-20 is stable and is in fair to good overall condition, requiring maintenance typical for a log structure. In order for the building to be used, the interior must be finished and new utilities brought to the building. The building is also not ADA accessible in its current form, and due to its small footprint, it would be difficult to accommodate. A large part of the structure dates to the renovations in 1976; therefore, fewer than 20% of early log walls are extant as well as two original pole rafters and one collar tie. Chimney brick was salvaged and reused to reconstruct the existing chimney, as reportedly was the foundation brick. Window sashes are historic. All exterior trim and the door date to 1976.

Two-Story Log House (HS-20) Existing Conditions – Structural

The Two-Story Log House was reportedly originally constructed ca. 1900 and was mostly reconstructed in 1976. It is approximately 14-feet by 15-feet and approximately 20-feet tall. It has a gable roof, a chimney, and an exterior door on the second level.

Foundation

The foundation exposed above grade is double wythe brick. An extensive investigation into the condition of the foundation was not performed. No access to the crawlspace is available and no excavations were performed. The brick that was visible on the exterior did not show any signs of movement or other structural issues.

Exterior Walls

The sill logs bear directly on the brick and are not in contact with the ground. The chinking and daubing on the exterior of the structure is no longer adhered or missing in places (Figure 4.424).



Figure 4.424. Near west window, second level. (SEA 2017)

Several of the logs have damage from insects. In places the damage is extensive. Some of the damage may also be from woodpeckers.

The window jambs on the east window have deterioration from rot (Figure 4.425).



Figure 4.425. Rotted jamb, east window. (SEA 2017)

Interior Framing

Hewn beams measuring 7-inch by 7-inch spaced approximately 2-feet on center, spanning north-south support the loft level of the Two-Story Log House. Several of the timbers are clearly artificially distressed replacement members.

The beams are pocketed into the log walls except at the framing around the stair opening. A small joist and small posts support the hewn beams at the stairs (Figure 4.426). There is casing around the joist to make it appear larger like the hewn beams.



Figure 4.426. Joist at framing around stairs. (SEA 2017)

Upstairs, the chimney is supported by a steel frame; there is no fireplace.

Roof Framing

"A" frames of 1 ½" by 3 ½" modern lumber are spaced at 16-inches on center. They are supported by the log walls, but the connections to the logs are hidden by chinking and daubing. No tie downs to resist roof uplift could be observed at these locations. There is no ridge beam. One frame, which appears to be a remnant from an earlier roof, has been retained (Figure 4.427).



Figure 4.427. Roof framing. (SEA 2017)

Two-Story Log House (HS-20) Existing Conditions – Mechanical and Electrical

Introduction - Two-Story Log Cabin (HS-20)

Henderson Engineers conducted a site visit on June 12th through 14th of 2017. There are no existing utility services to the building.

The 2015 International Building Codes, including 2015 International Fire Code, 2015 International Plumbing Code, 2015 International Mechanical Code, 2015 International Fuel Gas Code, and the 2014 National Electrical Code (NEC) were used for the evaluation of the MEP systems.

Mechanical Systems

There are no existing cooling or heating systems in the Two-Story Log Cabin.

There is an existing bracketed chimney for a heating stove flue along the west wall of the second floor (Figures 4.428 and 4.429).





Figures 4.428 and 4.429. Chimney from second floor. (HEI 2017)

Electrical Systems

Existing electrical to the Two-Story Log Cabin appears to be fed from the main house (HS-18) electrical system. There is a GFCI duplex receptacle, with weatherproof cover, mounted on the east exterior wall of the cabin (Figures 4.430 and 4.431). The existing exterior receptacle is not a weather-resistant rated device and is not currently functioning. There are no existing electrical devices or lights inside the cabin




Figures 4.430 and 4.431. Duplex receptacle mounted to exterior of cabin. (HEI 2017)

There is an intrusion detection system in the cabin that consists of a single motion detector and siren located on the first floor (Figures 4.432 and 4.433). It is fed from a security system panel in the basement of the main house, but the functionality of the system is unknown.




Figures 4.432 and 4.433. Intrusion detection devices. (HEI 2017)

Plumbing Systems

There are no existing plumbing systems in the Two-Story Log Cabin.

Fire Protection Systems

There are no existing fire protection systems in the Two-Story Log Cabin.

Two-Story Log House HS-20 Significant Character Defining Features

Care should be taken to preserve the following significant historic features with routine maintenance and through future rehabilitation projects.

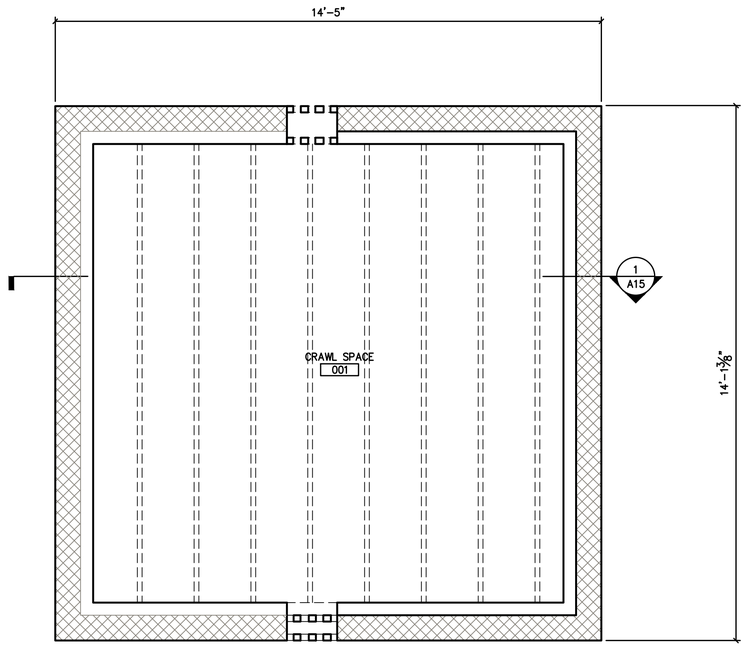
Exterior:

- Massing – Two-story with a gable roof and gable entry.
- Basic Footprint – Rectangular.
- Log Walls – A handful of original or early logs remain.
- Masonry Foundation – Contemporary, but replica of historic foundation.
- Door and Window Placement - Original window sashes remain.
- Roof – Dormer at south second floor door. Wood shingle roof.
- Chimney – Reconstructed brick masonry chimney in southwest corner of roof.

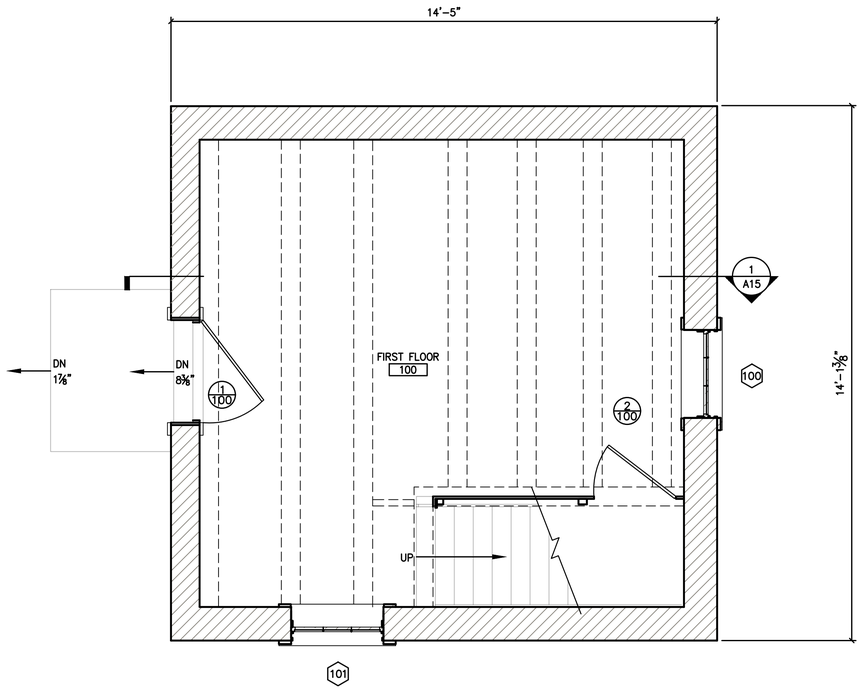
Interior:

- Roof Framing – Two rafters and one collar tie.
- Interior Room Arrangement – One room per floor.
- Original wood winding staircase.

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1 A11 EXISTING CRAWL SPACE PLAN
1/2" = 1'-0"



2 A11 EXISTING FIRST FLOOR PLAN
1/2" = 1'-0"

PROJECT NORTH

PROJECT NORTH

2 0 2 4
SCALE OF FEET

KEY	
#	DRAWING KEY NOTES
000	WINDOW NUMBER
000/0	DOOR NUMBER
000	ROOM NUMBER
	BRICK/STONE WALL
	LOG WALL
	WOOD FRAME WALL

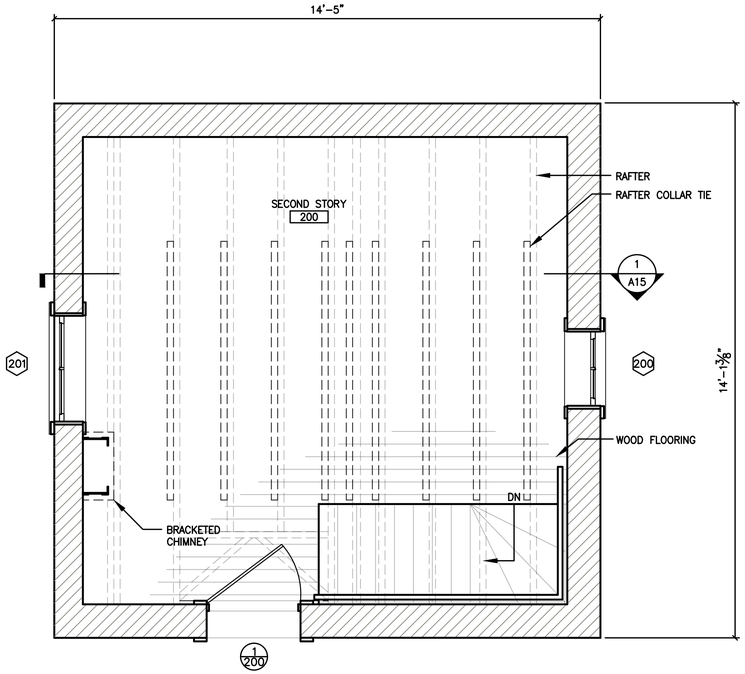
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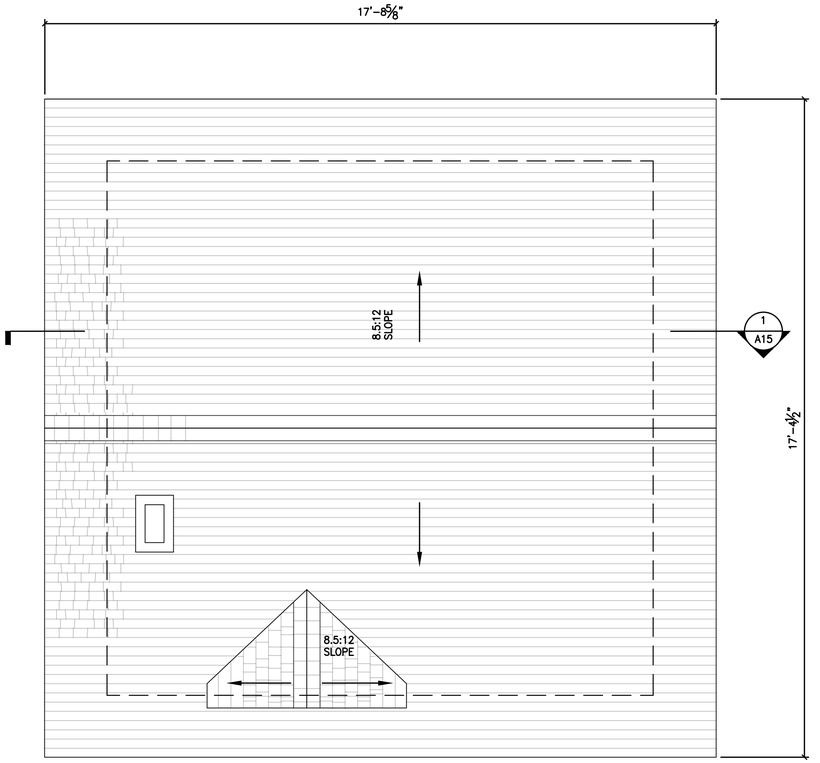
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EXISTING CONDITION DRAWINGS
HS-20
TWO-STORY LOG HOUSE
BAILLY HOMESTEAD
INDIANA DUNES NATIONAL LAKESHORE
PORTER, INDIANA

DRAWING NO. 626 138616
PMIS/PKG NO. 20940
SHEET 12 OF 24



1 A12 EXISTING SECOND FLOOR PLAN
1/2" = 1'-0"

PROJECT NORTH



2 A12 EXISTING ROOF PLAN
1/2" = 1'-0"

PROJECT NORTH

2 0 2 4
SCALE OF FEET

KEY	
#	DRAWING KEY NOTES
000	WINDOW NUMBER
000/0	DOOR NUMBER
000	ROOM NUMBER
	BRICK/STONE WALL
	LOG WALL
	WOOD FRAME WALL

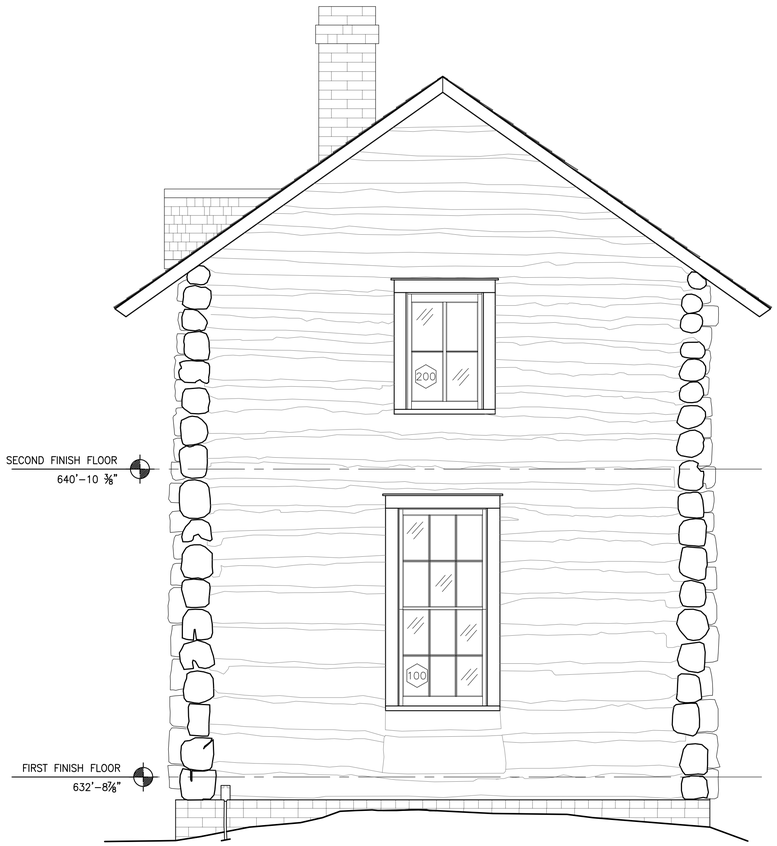
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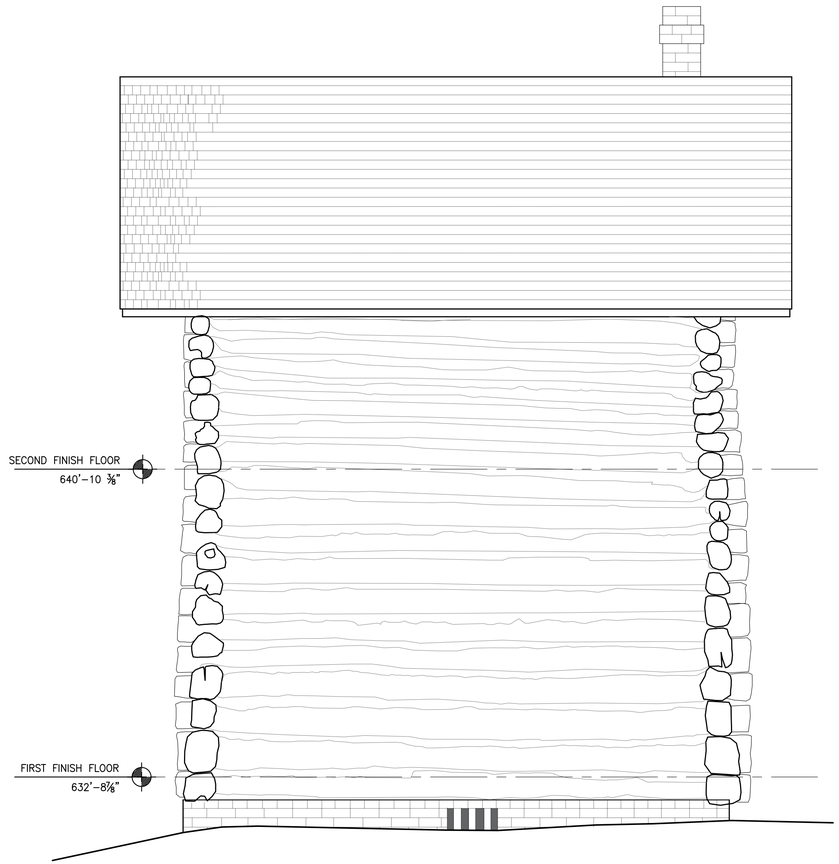
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TITLE OF SHEET
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HS-20
TWO-STORY LOG HOUSE
BAILLY HOMESTEAD
INDIANA DUNES NATIONAL LAKESHORE
PORTER, INDIANA

DRAWING NO. 626 138616
PMIS/PKG NO. 20940
SHEET 13 OF 24



1 A13 EXISTING EAST ELEVATION
1/2" = 1'-0"



2 A13 EXISTING NORTH ELEVATION
1/2" = 1'-0"

2 0 2 4
SCALE OF FEET

KEY	
#	DRAWING KEY NOTES
000	WINDOW NUMBER
000 / 0	DOOR NUMBER
000	ROOM NUMBER

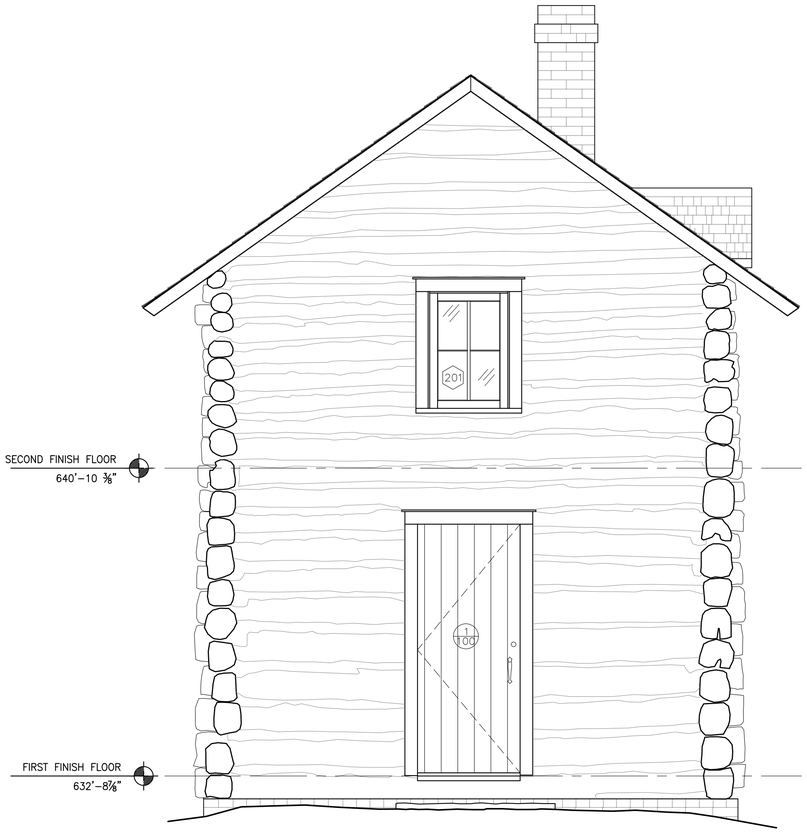
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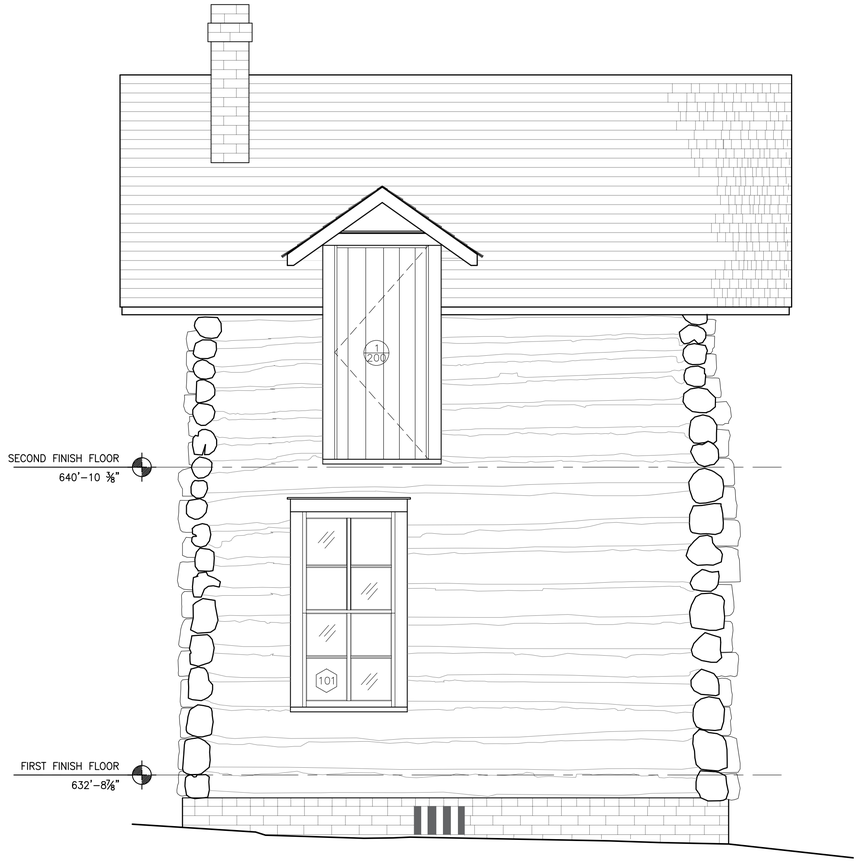
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HS-20
TWO-STORY LOG HOUSE
BAILLY HOMESTEAD
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PORTER, INDIANA

DRAWING NO. 626
138616
PMIS/PKG NO. 20940
SHEET 14 OF 24



1 A14 EXISTING WEST ELEVATION
1/2" = 1'-0"



2 A14 EXISTING SOUTH ELEVATION
1/2" = 1'-0"

KEY	
#	DRAWING KEY NOTES
000	WINDOW NUMBER
000/0	DOOR NUMBER
000	ROOM NUMBER

2 0 2 4
SCALE OF FEET

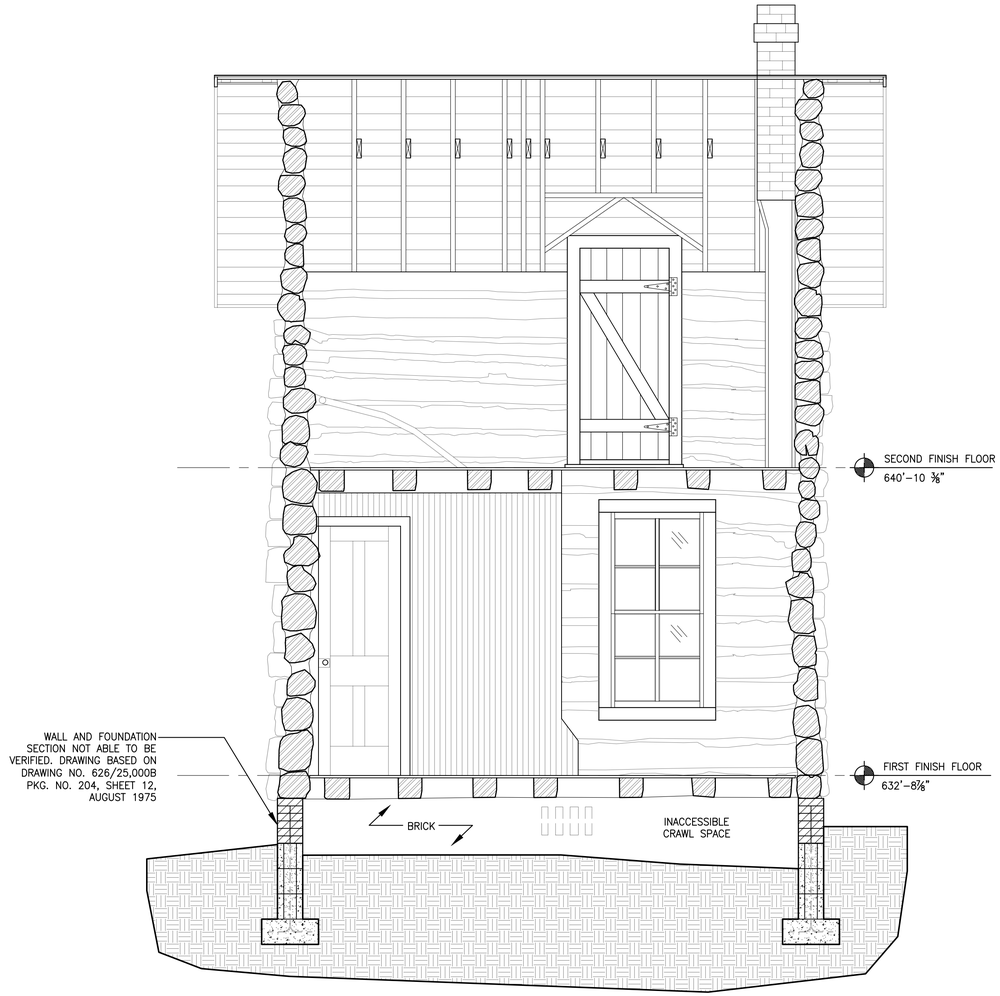
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TITLE OF SHEET
EXISTING CONDITION DRAWINGS
HS-20
TWO-STORY LOG HOUSE
BAILLY HOMESTEAD
INDIANA DUNES NATIONAL LAKESHORE
PORTER, INDIANA

DRAWING NO. 626 138616
PMIS/PKG NO. 20940
SHEET 15 OF 24



1 / A15 EXISTING BUILDING SECTION
1/2" = 1'-0"

2 0 2 4
SCALE OF FEET

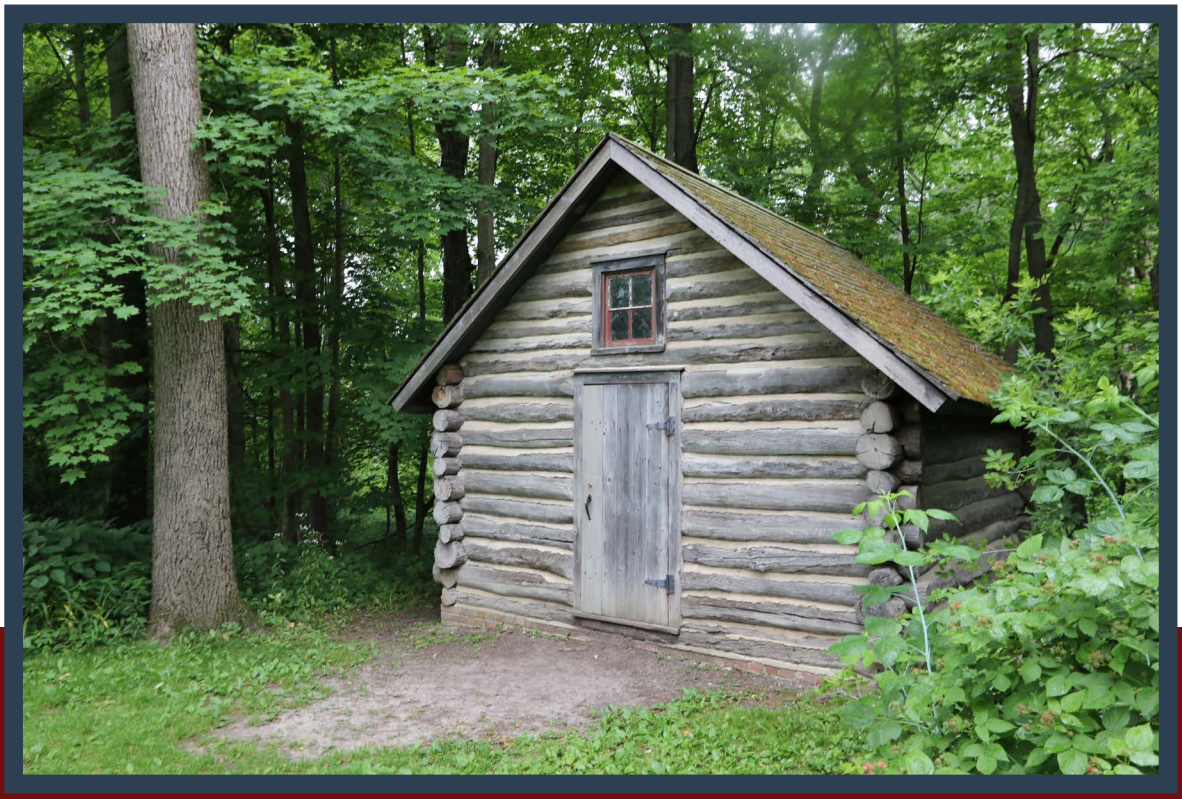
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SUB SHEET NO. A15

TITLE OF SHEET
EXISTING CONDITION DRAWINGS
HS-20
TWO-STORY LOG HOUSE
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SHEET 16 OF 24



Storehouse, view looking southwest. (STRATA 2017)

4 EXISTING CONDITIONS
STOREHOUSE

Storehouse (HS-21) Existing Conditions – Architectural

Existing plans and elevations of the Storehouse can be found following this narrative. Required repairs and proposed treatments (narrative and drawings) can be found in the Chapter 6 Treatment Recommendations section of this report.



Figure 4.434. View of HS-21 Storehouse, East elevation. (STRATA 2017)

The Storehouse (HS-21) is located north and west of the main house, across the gravel drive. The building is sometimes referred to as the Fur Storage Building, the Store, or the Trading Post.

The vernacular log building consists of a brick and concrete block foundation, constructed in 1976, and a one-story horizontal log structure with a timber-frame gable roof. The foundation is vented on the west and south elevations, by leaving openings in the brick foundation wall. The structure consists of a single 'pen' or room with a gable front entry. The 188-square foot building is essentially square in plan, at 13'-8" (north/south) and 13'-9" (east/west). A small, four-lite window is located above the front entry on the east elevation, and a second small window opening without a sash is centered in the back wall. Logs are exposed on the exterior and on the interior and are daubed with a Portland concrete material. The building is topped with a wood shingle roof and has no gutters. The wood door and trim are unfinished wood. Window sashes were painted, but are deteriorated.

The logs are fastened at the corners through use of a saddle type of notch (Figure 4.1), which locks the ends of the logs into place and provides stability. Exposed outlookers at the roof eaves are 2x4s and align with the interior rafters. The front door is secured by a cylindrical lock. There is no ADA access into the building, as there is a step up to finished floor from the front entry.



Figure 4.435. View of HS-21 Storehouse, South elevation. (STRATA 2017)



Figure 4.436. View of HS-21 Storehouse, West elevation. (STRATA 2017)



Figure 4.437. View of HS-21 Storehouse, North elevation. (STRATA 2017)

The Storehouse is currently used for interpretative programs as a trading post and is open during other special events at the historic site. The interior is fashioned into a fur trading store, with a counter, shelving and various implements and storage components (Figures 4.438 – 4.441). The interior contains 5-inch wide pine tongue and groove replacement flooring. The room is spanned by three log collar ties, which are set low; the lowest being only 5'-8 ½" to the bottom of the log. The underside of the roof structure is open and exposed inside the room. Rafters consist of contemporary 2x6 standard framing at 24-inches on center. The contemporary wood skipped sheathing is topped with a white asbestos roofing underlayment. The white underlayment is very noticeable between the roof skipped sheathing. Historically, the interior of the building may have had exposed logs, but the interior was later finished with board walls and may have had an earthen floor. The building is uninsulated.



Figure 4.438. View of HS-21 Storehouse, Interior, looking west. (STRATA 2017)



Figure 4.439. View of HS-21 Storehouse, Interior, looking east. (STRATA 2017)



Figure 4.440. View of HS-21 Storehouse, Interior of east window sash. (STRATA 2017)



Figure 4.441. View of HS-21 Storehouse, Interior of opening in west wall and shutter. (STRATA 2017)

Existing Conditions (Summer 2017 Assessment):

- Deteriorated wood roofing shingles with moss growth.
- Deteriorated fascia and rake board.
- Overall log weathering. The last known sealant installation was in 2004.
- End grain of several logs is deteriorating or suffering from a more recent insect infestation (Figure 4.442).
- Checks in the top portion of logs can allow water to collect and further log deterioration.
- Saddle notches overcut, exposing a large gap between the top log and the outer log crown. Exposing this skyward-facing joint, can hold water and snow and increase deterioration.
- Portland cement-based daubing is cracked in some places. This type of daubing is not typically recommended for log structures, as the Portland is very hard and does not breathe. Refer to the Chinking and Daubing section at the beginning of Chapter 4 for more information on the Portland daubing material usage.
- Deteriorated window sash.
- Exposed raw wood door, door jamb, door trim, and window shutter.
- Bottom portion of foundation and building are dirty due to water splashing onto building from no gutters.
- Hazardous Material: the roof contains confirmed asbestos underlayment.
- Foundation is soiled from splashing of dirt due to lack of gutters.
- The Sentricon System that was installed for termite monitoring was supposed to be removed several years ago. The green plastic units are still located in grade surrounding the building. These are no longer functioning or monitored.
- No ADA Access into building.
- Condition of alarm system unknown.
- No foundation crawl space access. Only visibility is through the vents.



Figure 4.442. View of HS-21 Storehouse log end grain insect infestation. (STRATA2017)



Figure 4.443. View of HS-21 Storehouse deteriorated window sash. (STRATA 2017)

Building Code, Life Safety, and ADA Existing Conditions

The Storehouse HS-21 is currently used for interpretation during special park events.

Current Use – Museum – 'B' Occupancy

Square Footage – 151 sf

Occupant load for a Storehouse, 'Exhibit Rooms' per IBC – 151sf / 15 sf = 10 persons

There is currently no smoke or fire alarm, nor are there exit signs or emergency lighting. There is not one required, due to the Occupancy and low Occupant Load.

There is no fire extinguisher stored on site, due to the building not being conditioned. One is brought to the building during interpretive programming.

The building is not ADA accessible. There is no accessible route to the building, nor is there an accessible landing. The front door is wide enough to accommodate an accessible entry; however, the door hardware is not ADA accessible.

Conclusion

The Storage HS-20 building is stable and is in good overall condition, requiring maintenance typical for a log structure. The building is not ADA accessible. A majority of the structure dates to the renovations in the mid-1970s; therefore, very little original or early log materials are extant. A handful of early logs may remain, especially on the east elevation. The center collar tie is noted to be early. The east four-lite window sash and jamb are early, although the glass lites have been replaced. The board and batten shuttered opening on the west wall appears to have an early jamb and interior trim.

Storehouse (HS-21) Existing Conditions – Structural

The Storehouse was reportedly originally constructed ca. 1890-1907 and was mostly reconstructed in 1976. It is a single-story log structure approximately 13 ½-feet square. It has a gable roof, with the ridge running east to west. The entrance door is on the east wall.

Foundation

Similar to the Two-Story Log House, the foundation for the storehouse is double wythe brick. At the entrance to the house, only one course of brick is exposed above grade. The brick that was visible did not show any signs of movement or other structural issues. Grade slopes down toward the back of the house and continues sloping away from the house to the west. An extensive investigation into the condition of the foundation was not performed. No access to the crawlspace is available and no excavations were performed.

Floor Framing

There is some visibility into the crawlspace from two vents in the brick foundation. The floor framing appears to be 6-inch by 6-inch beams spaced approximately at 2-feet on center, spanning north to south, and pocketed into the sill logs. The beams look modern and may have pressure treatment of some kind.

Exterior Walls

The sill logs bear directly on the brick foundation; they are not in contact with the ground. The chinking on the exterior of the structure cracked or chipped away in many places.

The logs have extensive damage from wood boring insects (Figure 4.444), and possibly birds or other animals.

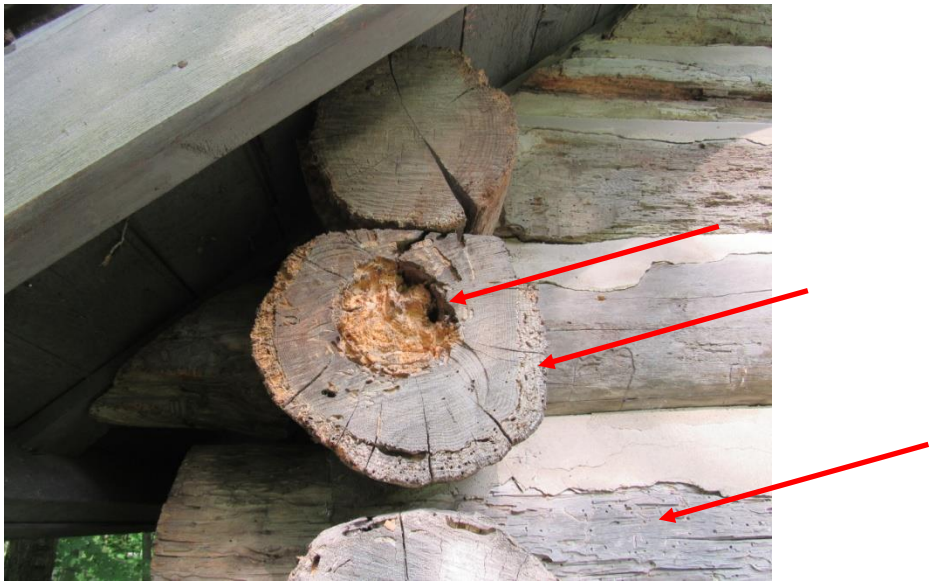


Figure 4.444. Damaged logs, southeast corner. (SEA 2017)

Some logs have deteriorated, likely due to moisture (Figure 4.445).



Figure 4.445. Deteriorated log near entrance. (SEA 2017)

The door frame and door for the house are newer material.

Interior Framing

Three beams, 3 to 5-inches in diameter, span north to south overhead in the storehouse. The beams are approximately equally spaced and are pocketed into the tops of the log walls. There is extensive damage from wood boring insects on these beams (Figure 4.446)



Figure 4.446. Insect damage on beam. (SEA 2017)

Roof Framing

The roof is composed of newer 2-inch by 6-inch framing members spaced at 16-inches on center, except at the center of the house, where the space is 27 ¼-inches (Figure 4.447).



Figure 4.447. Roof framing. (SEA 2017)

The roof framing is pocketed into the top log, or roof plate. Tie down connections to resist uplift are not visible at these locations.

Storehouse (HS-21) Existing Conditions – Mechanical and Electrical

Introduction - Storehouse (HS-21)

Henderson Engineers conducted a site visit on June 12th through 14th of 2017. There are no existing utility services to the building.

The 2015 International Building Codes, including 2015 International Fire Code, 2015 International Plumbing Code, 2015 International Mechanical Code, 2015 International Fuel Gas Code, and the 2014 National Electrical Code (NEC) were used for the evaluation of the MEP systems.

Mechanical Systems

There are no existing mechanical systems in the Storehouse.

Electrical Systems

There is no existing power to the Storehouse.

There is an existing floor box near the entry door that contains telecommunications cables (Figure 4.448). It is unclear where these cables are connected to, however they are likely fed through below grade conduit from the main house.



Figure 4.448. Telecommunications floor box. (HEI 2017)

There is an intrusion detection system in the storehouse that consists of a single door sensor and siren (Figures 4.449 and 4.450). It is fed from a security system panel in the basement of the main house, but the functionality of the system is unknown.





Figures 4.449 and 4.450. Intrusion detection system devices. (HEI 2017)

Plumbing Systems

There are no existing plumbing systems in the Storehouse.

Fire Protection Systems

There are no existing fire protection systems in the Storehouse.

Storehouse HS-21 Significant Character Defining Features

Care should be taken to preserve the following significant historic features with routine maintenance and through future rehabilitation projects.

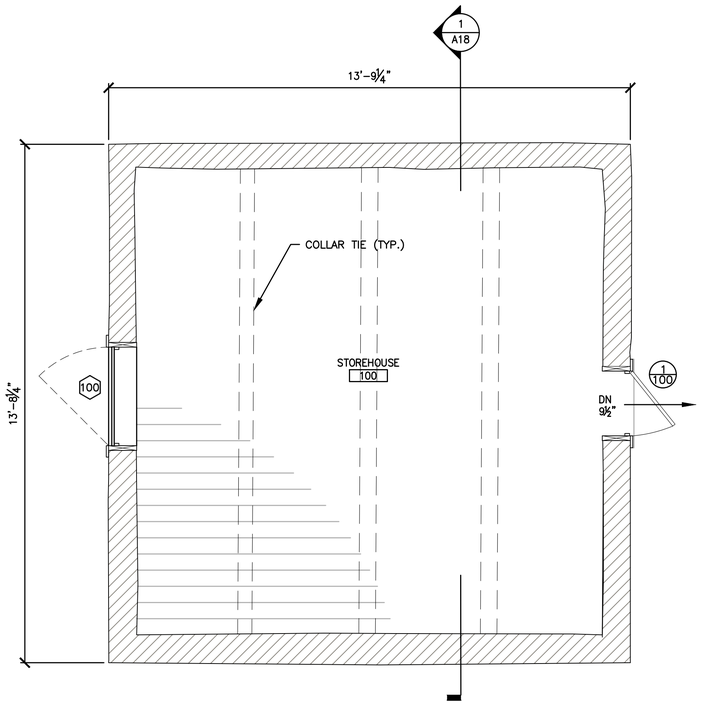
Exterior:

- Massing – One-story with a gable roof, gable entry
- Basic Footprint – Basically square
- Log Walls – A handful of original or early logs remain, which are reportedly to be mostly concentrated within the east wall
- Masonry Foundation – Contemporary, but replica of historic foundation
- Door and Window placement; Original window sash and some trim
- Roof and Guttering – Wood shingle roof

Interior:

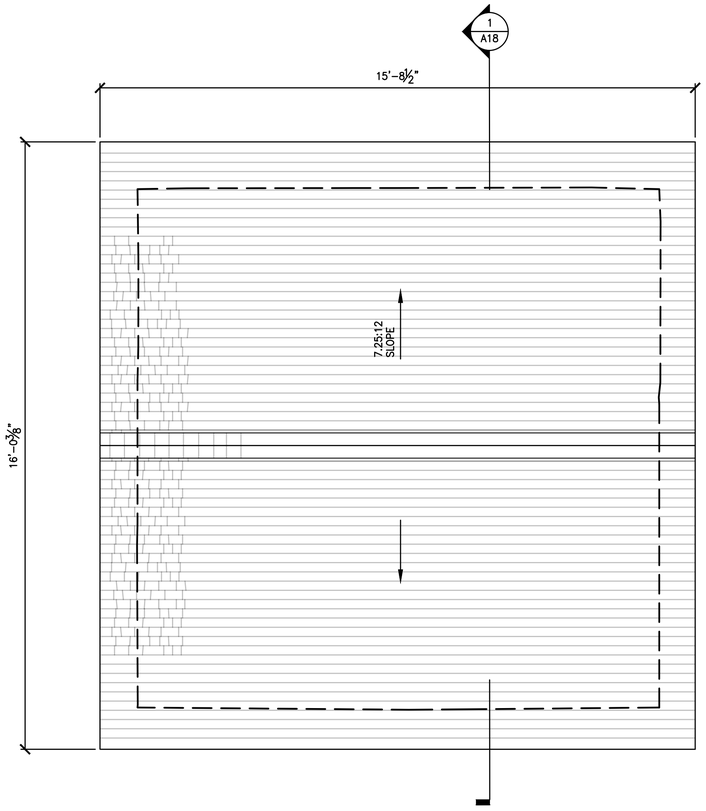
- Roof Framing – One original collar tie

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1 EXISTING FIRST FLOOR PLAN
A16 1/2" = 1'-0"

PROJECT NORTH



2 EXISTING ROOF PLAN
A16 1/2" = 1'-0"

PROJECT NORTH

2 0 2 4
SCALE OF FEET

KEY

- # DRAWING KEY NOTES
- 000 WINDOW NUMBER
- 000/0 DOOR NUMBER
- 000 ROOM NUMBER
- BRICK/STONE WALL
- LOG WALL
- WOOD FRAME WALL

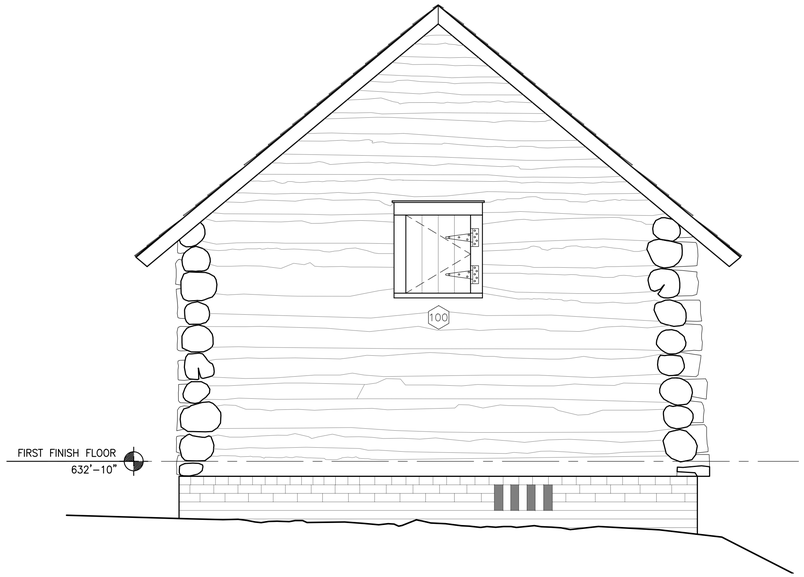
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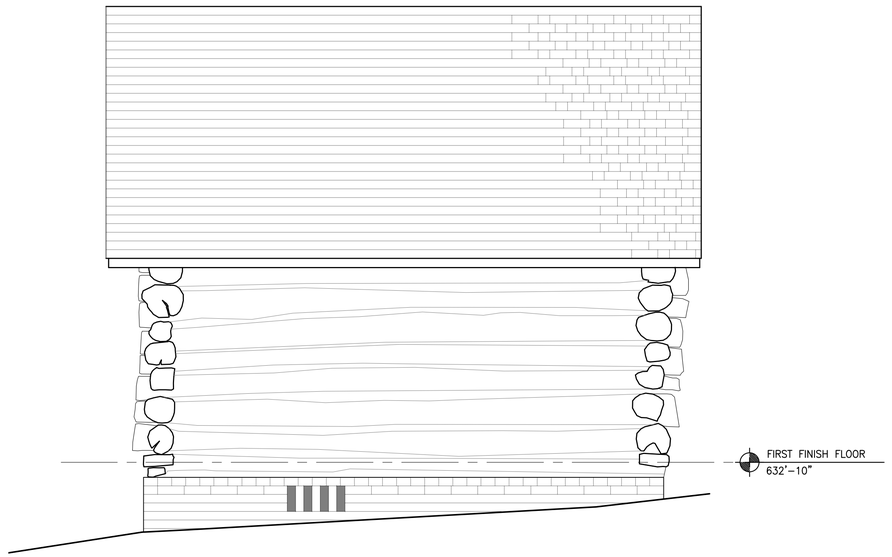
SUB SHEET NO. A16

TITLE OF SHEET
EXISTING CONDITION DRAWINGS
HS-21
STOREHOUSE
BAILLY HOMESTEAD
INDIANA DUNES NATIONAL LAKESHORE
PORTER, INDIANA

DRAWING NO. 626 138616
PMIS/PKG NO. 20940
SHEET 17 OF 24



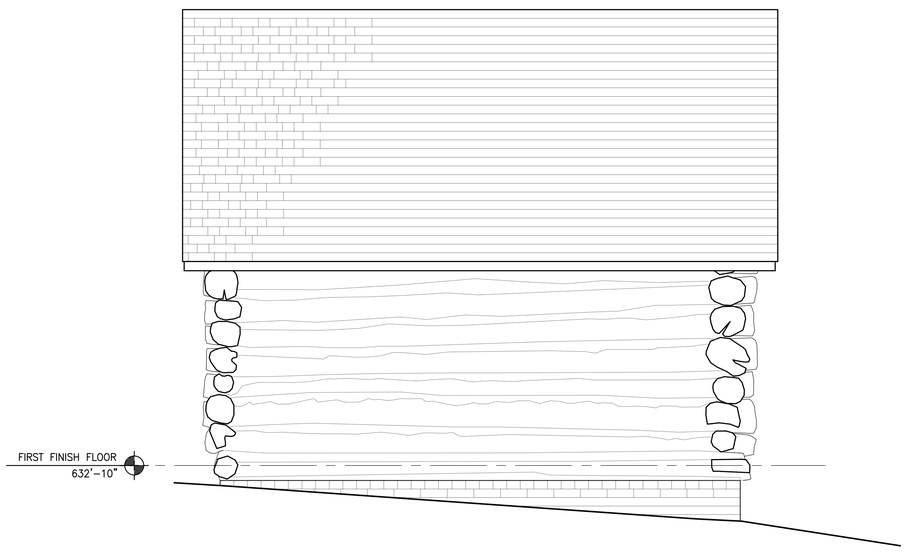
1 A17 EXISTING WEST ELEVATION
1/2" = 1'-0"



2 A17 EXISTING SOUTH ELEVATION
1/2" = 1'-0"



3 A17 EXISTING EAST ELEVATION
1/2" = 1'-0"



4 A17 EXISTING NORTH ELEVATION
1/2" = 1'-0"

2 0 2 4
SCALE OF FEET

KEY	
#	DRAWING KEY NOTES
000	WINDOW NUMBER
000 / 0	DOOR NUMBER
000	ROOM NUMBER

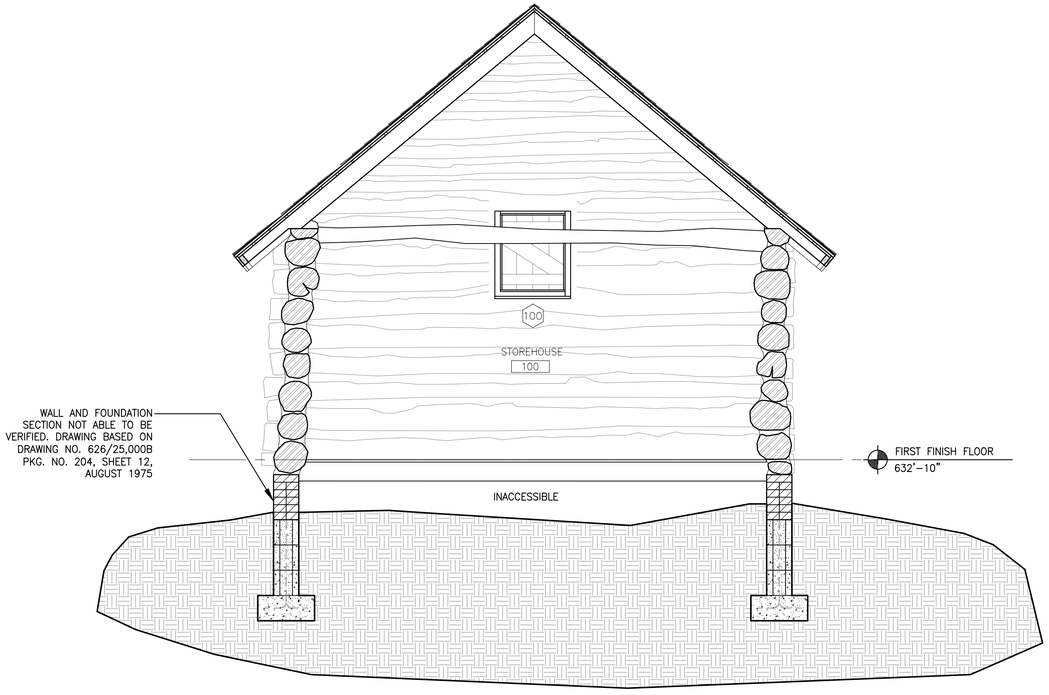
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SUB SHEET NO. A17

TITLE OF SHEET
EXISTING CONDITION DRAWINGS
HS-21
STOREHOUSE
BAILLY HOMESTEAD
INDIANA DUNES NATIONAL LAKESHORE
PORTER, INDIANA

DRAWING NO. 626 138616
PMIS/PKG NO. 20940
SHEET 18 OF 24



1 / A18 EXISTING BUILDING SECTION
1/2" = 1'-0"

KEY	
#	DRAWING KEY NOTES
000	WINDOW NUMBER
000 / 0	DOOR NUMBER
000	ROOM NUMBER

2 0 2 4
SCALE OF FEET

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SUB SHEET NO. A18

TITLE OF SHEET
EXISTING CONDITION DRAWINGS
HS-21
STOREHOUSE
BAILLY HOMESTEAD
INDIANA DUNES NATIONAL LAKESHORE
PORTER, INDIANA

DRAWING NO. 626 138616
PMIS/PKG NO. 20940
SHEET 19 OF 24



Chapel, view looking southeast. (STRATA 2017)

4 EXISTING CONDITIONS
CHAPEL

Chapel (HS-22) Existing Conditions – Architectural

Existing plans and elevations of the Chapel can be found following this narrative. Required repairs and proposed treatments (narrative and drawings) can be found in the Chapter 6 Treatment Recommendations section of this report.



Figure 4.451. View of HS-22 Chapel, North and east elevations. (STRATA 2017)

The Chapel (HS-22) is located north of the main house and backs up to the ravine. There are many accounts of the building's chronology, origin, and use through the years – many of which are unable to be confirmed.

The vernacular log building consists of a decorative rusticated cast concrete block foundation and a one-story, T-shaped, horizontal log structure. The chapel was completely dismantled and reconstructed utilizing historic and salvaged logs in 1976 and set atop the old foundation. The building was lifted and additional logs replaced and set atop a new foundation in 2010.

The 314-square foot building consists of a single T-shaped room with a gable front entry in the top of the 'T.' The plan is essentially 17'-5" (north/south) and 21'-0" (east/west) in overall dimensions. The nave walls are full-height log walls, while the apse has half-height log walls and traditional stick framing upper walls clad with wood shingles. The crowns of the logs in the southeast and southwest corners of the apse are clad with vertical wood boards for protection. The roof over the nave is gabled, while the roof if hipped over the apse.

The replica rusticated cast concrete block foundation is vented on the south, east, and north elevations. Logs are exposed on the exterior and on the interior and are chinked with metal lath and daubed with a Portland concrete material.

The roof of the nave is framed with seven-inch diameter log purlins with 2x4s perpendicular at 24-inches on center. The roof of the apse is traditional 2x4 rafters. The 1x6 wood skipped sheathing is topped with a white asbestos roofing underlayment. The white underlayment is very noticeable between the roof skipped sheathing from the interior of the building. The building is topped with a wood shingle roof and has no gutters.

Pairs of in-swing casement 4-lite windows are centered on the north and south walls of the nave. Single, fixed windows are centered on the north and south walls of the apse. The window sashes are painted, but are deteriorated. The historic decorative crown glass is missing from the apse windows. The wood door and trim are unfinished wood.

The logs are fastened at the corners through use of a variety of saddle notches and V-notches (Figure 4.1), which lock the ends of the logs into place and provide stability. Trunnels are visible on the interior of the building, which provide some stability to the log walls. Eaves are finished boards and overhang the gable and sides of the building. The front door is secured by a cylindrical lock. There is no ADA access into the building, as there is a stone stoop and a step up to finished floor at the front entry.

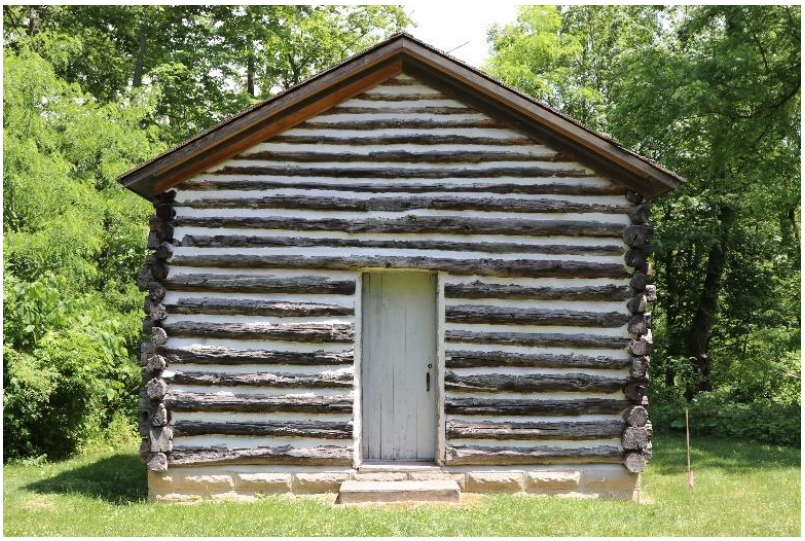


Figure 4.452. View of HS-22 Chapel, West elevation. (STRATA 2017)



Figure 4.453. View of HS-22 Chapel, South elevation. (STRATA 2017)



Figure 4.454. View of HS-22 Chapel, East elevation. (STRATA 2017)





Figure 4.455. View of HS-22 Chapel, North elevation. (STRATA 2017)

The Chapel is currently not in usable or functional condition on the interior. The interior historic finishes were removed during a previous rehabilitation for access for log replacement and foundation replacement (Figures 4.456 – 4.462). The interior is comprised of the nave and the apse. The apse is raised approximately eight inches above the nave. The two spaces are divided by a Gothic arch cased opening. The building contains 3 1/4-inch wide pine tongue and groove flooring in the nave, some of which is painted red. Flooring in the apse is 10 1/8-inches wide. The log and wood frame roof structure is visible throughout the two spaces. Historically, the interior of the building may have had exposed logs, but it was plastered by ca. 1900, as seen in Figures 2.120 and 2.129. With the exception of the trim at the apse cased opening and select wood flooring, all other historic finishes have been removed from the interior. The building is not insulated.

This building was not tested for hazardous materials. It should be assumed, until further testing is completed, that all painted surfaces contain lead and that the exposed roof underlayment contains asbestos, as is consistent with other buildings on the site. Animal droppings are prevalent throughout the building and present a health hazard.



Figure 4.456. View of HS-22 Interior, looking east towards apse. (STRATA 2017)



Figure 4.457. View of HS-22 Chapel, Interior apse, looking north. (STRATA 2017)



Figure 4.458. View of HS-22 Chapel, Interior apse, looking south. (STRATA 2017)



Figure 4.459. View of HS-22 Chapel, Interior, looking towards south wall. (STRATA 2017)



Figure 4.460. View of HS-22 Chapel, Interior, looking west. (STRATA 2017)



Figure 4.461. View of HS-22 Chapel, Interior, looking north. (STRATA 2017)



Figure 4.462. View of HS-22 Chapel, Interior, roof framing. (STRATA 2017)

Existing Conditions (Summer 2017):

Exterior

- Wood roofing shingles are in fair condition. There are a few missing shingles that require replacement.
- The metal flashing at the apse/nave wall intersection is not visible for inspection. This joint should be inspected to ensure it is sealed properly and in good order.
- No gutters or roof drainage at this time. Historically, there were gutters and very small downspouts on this building, as seen in Figure 2.124.
- Deteriorated rake board on east elevation and northeast corner appears to be gnawed on by squirrels. Replacement trim boards on east elevation are in good condition, but it is unknown if they were treated with a wood preservative. Rake board at east nave gable is difficult to inspect, but appears there is a large hole chewed through the board. This may be an access point for rodents into the building and needs to be inspected closer. (Figure 4.468).
- Overall log weathering. The last known sealant installation was in 2004.
- Portland cement-based daubing is cracked, loose, or missing throughout the exterior. In a few locations, a newer, thinner layer of daubing material is layered over an older daubing, and they were not well bonded and are separating, with the top layer flaking off. Portland cement daubing is not typically recommended for log structures, as the Portland is very hard and does not breathe. Refer to the Chinking and Daubing section at the beginning of Chapter 4 for more information on the Portland daubing material usage. There are sections of replacement mortar that do not match the 1970s mortar.
- Some older logs show signs of previous insect infestation. Active carpenter ants were visible on the interior of the building, along the west wall.
- Checks in the top portion of logs can allow water to collect and further log deterioration.
- Deteriorated window sashes. The nave windows require sash restoration (Figure 4.467). The sashes with the early decorative crown glass are missing. Fixed glazing panels have been installed in their place as a temporary measure. The window sills are set flush with the daubing. This does not allow for proper shedding of water from the sills, away from the log wall below.
- Woodpecker holes in exterior wall shingles. Shingles are dry and in overall fair to poor condition with no protective finishes. A few shingles are missing.
- Exposed raw wood at door, door jamb, door trim. The front door threshold is set flush with the daubing. This does not allow for proper shedding of water from the threshold, away from the foundation.
- Replacement rusticated cast concrete block foundation is in good condition.
- Foundation is soiled from splashing of dirt due to lack of gutters.
- Foundation crawl space access is through a temporary plywood board covering an opening in the east foundation. There does not appear to be a drain in the bottom of the access well, which is filled with gravel. Erosion is evident around the pre-formed well wall.

- Wood foundation vent frames are starting to show signs of deterioration (Figure 4.469). They are dry and have had animals chewing on them. Screening is still installed, but starting to rust and become loose.
- The concrete stoop at the front door has settled and is angled to drain towards the foundation.
- Hazardous Material: the roof contains asbestos underlayment.
- No ADA Access into building.



Figure 4.463. View of HS-22 Chapel V-notch and saddle notch corner types. Note the two campaigns of Portland cement-based daubing materials. (STRATA2017)



Figure 4.464. Typical detail of HS-22 cracked Portland cement based daubing. (STRATA2017)

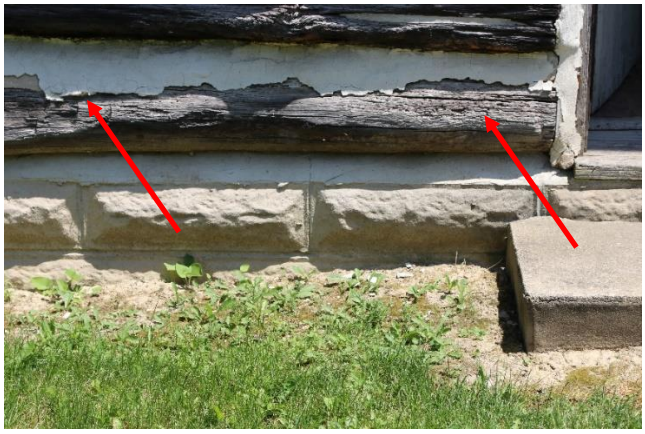


Figure 4.465. Typical detail of HS-22 multi-layered Portland cement based daubing, which is failing. (STRATA2017)



Figure 4.466. View of HS-22 Chapel deteriorated in-swing window sashes at south elevation. (STRATA 2017)



Figure 4.467. View of HS-22 Chapel apse window frame with missing sash and decorative glazing. Temporary glazing infill has been installed. (STRATA 2017)



Figure 4.468. View of HS-22 Chapel typical wood framed foundation vents. Wood frame is dry and unprotected, has been chewed on by animals, and the screening is beginning to rust. (STRATA 2017)



Figure 4.469. View of HS-22 Chapel typical wood framed foundation vents. Wood frame is dry and unprotected, has been chewed on by animals, and the screening is beginning to rust. (STRATA 2017)



Figure 4.470. View of HS-22 Chapel east wood framed foundation vent. Wood frame is dry and unprotected. There are two layers of screening installed, and the ferrous metal attachments are to rusting. (STRATA 2017)



Figure 4.471. View of HS-22 Chapel foundation crawl space access on the east elevation is covered with plywood. The access well is constructed with a pre-formed half-round corrugated well wall. Gravel is in the bottom of the well, but there does not appear to be a drain. Erosion is evident around the well wall. (STRATA 2017)



Figure 4.472. View of HS-22 Chapel typical deteriorated edge condition of wood roof shingles. Note, there are also missing wall shingles and wall shingles with woodpecker holes. (STRATA 2017)

Interior

- The smell of creosote on the interior is quite strong. This emanates from the reused power poles that were previously treated with creosote to protect them from deterioration and were installed during the 1976 log replacement campaign. There are approximately 9 total logs with creosote that were visible.
- Daylight is visible in many locations through the logs where the Portland cement daubing is deteriorated or missing.
- The interior of the building is full of debris and nuts, potentially from squirrels. There is also bat guano at the apse, indicating potential bats in the structure, although none were seen during the inspection.
- The interior finishes and trim have all been removed. The only finishes that remain are the wood flooring in the nave and the trim at the Gothic arch.
- The wood flooring in the apse appears to be replacement flooring. There is structural settling of the floor framing at the front edge of the apse, as the flooring is no longer flush at the front skirt board. This presents a tripping hazard.
- Portions of the wood floor are painted red, while some sections are not painted.
- Lead paint testing was not done for the Chapel building, but it should be assumed that all painted surfaces contain lead (trim, flooring, door, and window sashes).
- Remnant of gypsum board found behind Gothic arch trim. This may indicate gypsum wallboard was once installed on the interior.
- There are no current utility services active in the building.
- Old cloth wiring is exposed, although it is no longer functioning.
- Condition of alarm system unknown but is likely not in working condition.
- Thumb latch at the front door is partially missing.

Building Code, Life Safety, and ADA Existing Conditions

The Chapel HS-22 is currently unoccupied.

Current Use – Chapel – 'B' Occupancy

Square Footage

Nave	209 sf
Apse	63 sf
Total	272 sf

Occupant load for a chapel, per IBC – 272sf / 7 sf = 38 persons

There is currently no smoke or fire alarm, nor are there exit signs or emergency lighting. There is not one required, due to the Occupancy and low Occupant Load.

There is no fire extinguisher.

The building is not ADA accessible. There is no accessible route to the building, nor is there an accessible landing. The front door is wide enough to accommodate an accessible entry; however, the door hardware is not ADA accessible. The apse inside is raised eight inches above the nave floor. There is no striping or indicators for the change in floor level and the eight inches is above a minimum riser height for ADA accessibility. There is no railing at the floor level change.

Conclusion

The Chapel HS-22 building is stable and is in fair to good overall condition, requiring maintenance typical for a log structure. In order for the building to be used, the interior must be cleaned of rodent droppings, finished and new electrical service brought to the building. The building is also not ADA accessible in its current form. A large part of the structure dates to the renovations in 1976 and again in 2010; therefore, fewer than 50% of early log walls are extant. Floor framing all dates to 2010. Only three original log rafters were stated to be reused in 1976. All exterior trim and the door date to 1976 or 2010. Casement windows are original, but glazing is new. The decorative windows in the apse are missing.

Chapel (HS-22) Existing Conditions – Structural

The Chapel was reportedly first constructed in 1869 and subsequently partially rebuilt at least three times since (the apse was added ca. 1900 and later reconstructed in 1976 and again in 2010). It is a single-story log structure with two rooms; a sanctuary and an apse. The entrance is on the west side of the sanctuary, which is approximately 14-feet by 17-feet and has a gable roof with the ridge running east to west. The apse is approximately 7-feet by 10-feet, and is attached to the east side of the sanctuary.

Foundation and Floor Framing

The crawl space for the Chapel is accessible through a light well on the east side of the apse. The foundation dates to 2010 and is primarily concrete. The floor of the crawl space is concrete and the foundation walls are 12-inch thick concrete, approximately 3 ½-feet high.
Two courses of either 8-inch wide concrete block or cast stone are laid on top of the foundation walls. These blocks support the log walls of the structure.

In the nave, wood blocking is also installed on top of the concrete foundation walls and supports the floor joists at each end. The joists do not appear to be supported by the concrete block or pocketed into the exterior log walls. The joists are also supported along their span by two log beams with concrete masonry unit (CMU) columns. The joists in the nave are typically 2-inch by 8-inch members spaced at 16-inches on center, running north and south (Figure 4.473).



Figure 4.473. Crawl space of Chapel, looking west. (SEA 2017)

The joists in the apse are 2-inch by 7 ¼-inch members spaced at 16-inches on center, running north and south. They are supported by logs, wood blocking, and 3-inch wide CMU, on the foundation wall. The joists are toe nailed into the logs.

No investigations were performed as to what steel reinforcing may be present in the concrete foundation or the CMU columns.

Exterior Walls

The chinking on the exterior of the structure is cracked in places and no longer adhered to some logs, especially at vertical joints. The logs do have some insect damage and locations of wood rot (Figure 4.474).



Figure 4.474. Rot on exterior log, south elevation of Chapel. (SEA 2017)

Several of the logs have been repaired using wood patches. There are several logs that have been completely replaced with creosote treated members.

The exterior walls in the apse are log walls for the lower half and stud framing for the upper half. The portion that is stud wall framing has cedar shingle siding on the exterior. The shingles appear to be affected by woodpecker damage, especially on the east elevation (Figure 4.475).



Figure 4.475. Shingles, east side of apse. (SEA 2017)

Roof Framing

The roof framing for the nave portion of the Chapel is composed of log purlins, ranging in size from 4-inches to 8-inches in diameter. The purlins run east and west, parallel to the direction of the gable. Above the purlins are flat rafters running north and south and sheathing running east and west (Figure 4.476).



Figure 4.476. Roof framing in nave. (SEA 2017)

The hip roof framing in the apse is modern 2-inch by 4-inch rafters and sheathing (Figure 4.477).



Figure 4.477. Roof framing in apse. (SEA 2017)

Tie-down connections for the log purlins in the nave and the roof rafters in the apse are not visible.

Chapel (HS-22) Existing Conditions – Mechanical and Electrical

Introduction - Chapel (HS-22)

Henderson Engineers conducted a site visit on June 12th through 14th of 2017. There are no existing utility services to the building.

The 2015 International Building Codes, including 2015 International Fire Code, 2015 International Plumbing Code, 2015 International Mechanical Code, 2015 International Fuel Gas Code, and the 2014 National Electrical Code (NEC) were used for the evaluation of the MEP systems.

Mechanical Systems

There are no existing mechanical systems in the chapel.

Electrical Systems

Existing electrical to the chapel appears to be fed from the main house (HS-18) electrical system through below grade conduit. There are currently no functioning devices in the chapel, but there is a push-button switch located at the entry to the apse with MC cable routed from the switch to the peak of the apse, where lighting was previously installed (Figures 4.478 and 4.479).





Figures 4.478 and 4.479. Push-button switch and MC cable. (HEI 2017)

There is no evidence of an existing intrusion detection system in the chapel, however there is a security system panel in the basement of the main house that previously fed the chapel.

Plumbing Systems

There are no existing plumbing systems in the Chapel.

Fire Protection Systems

There are no existing fire protection systems in the Chapel.

Chapel HS-22 Significant Character Defining Features

Care should be taken to preserve the following significant historic features with routine maintenance and through future rehabilitation projects.

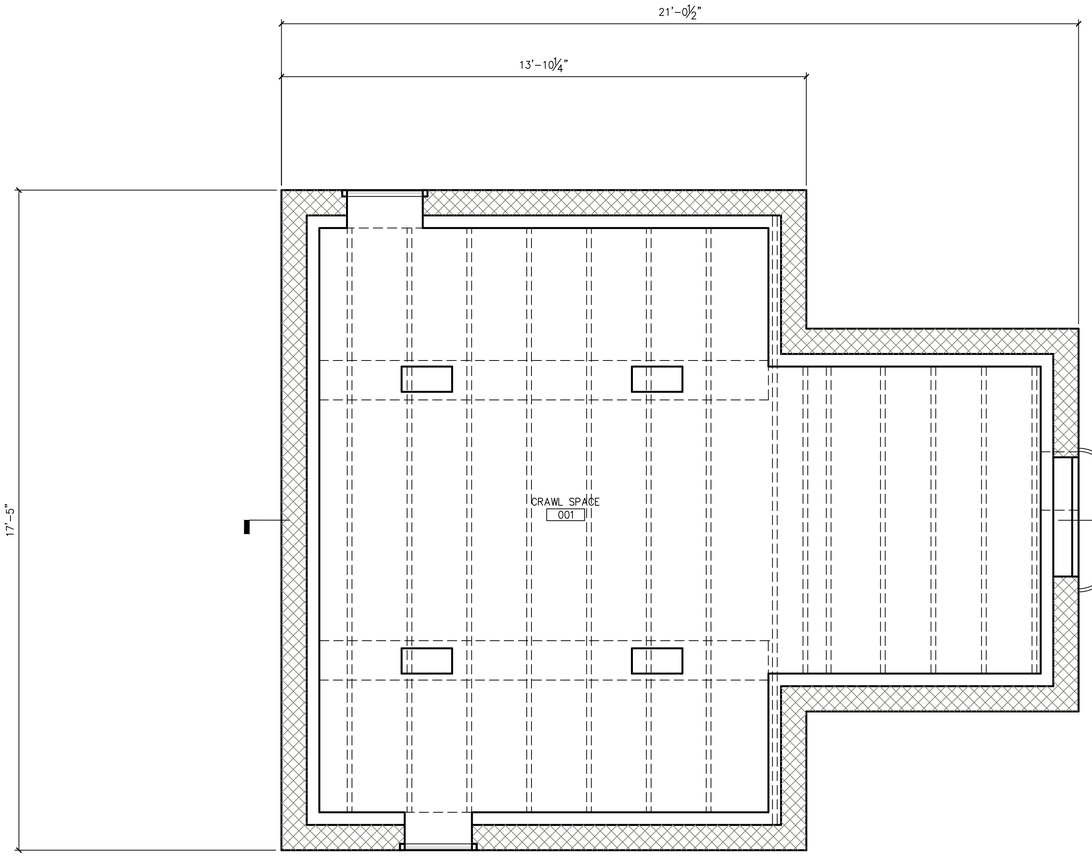
Exterior:

- Massing – One-story with a gable roof at nave and hipped roof at the apse. Gable entry.
- Basic Footprint – 'T'-shaped plan.
- Log Walls – A handful of original or early logs remain.
- Masonry Foundation – Contemporary, but replica of historic foundation.
- Door and Window placement; Original window sashes in north and south nave walls remain. Original window openings remain in apse, although sashes are missing.
- Roof – Sawn wood shingle roof.

Interior:

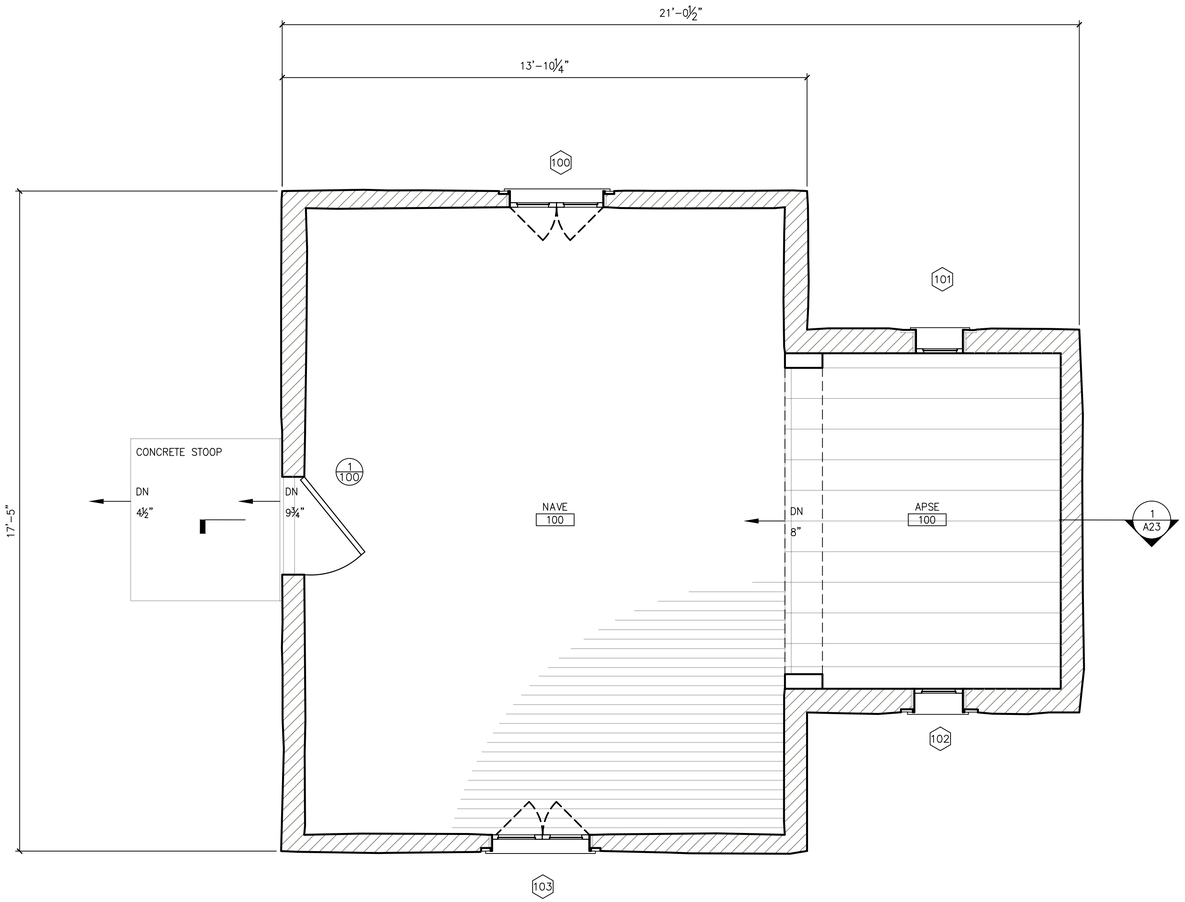
- Roof Framing – Three original roof rafters.
- Interior Room Arrangement – Nave and apse.
- Wood Flooring – Painted red.
- Gothic Arch Cased Opening at Apse.

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1 A19 EXISTING CRAWL SPACE FLOOR PLAN
1/2" = 1'-0"

PROJECT NORTH



2 A19 EXISTING FIRST FLOOR PLAN
1/2" = 1'-0"

PROJECT NORTH

2 0 2 4
SCALE OF FEET

KEY
- (#) DRAWING KEY NOTES
- 000 WINDOW NUMBER
- 000/0 DOOR NUMBER
- 000 ROOM NUMBER
- BRICK/STONE WALL
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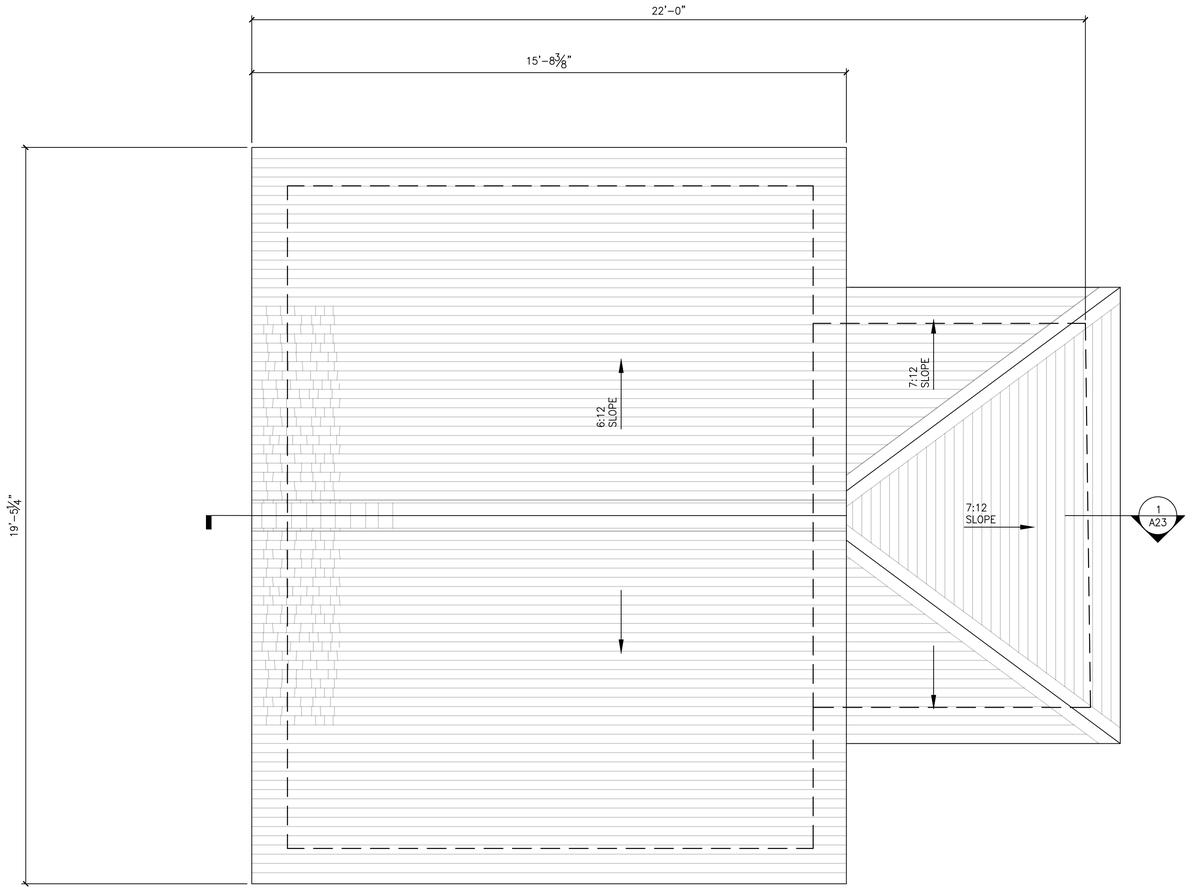
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SUB SHEET NO. A19

TITLE OF SHEET
EXISTING CONDITION DRAWINGS
HS-22
CHAPEL
BAILLY HOMESTEAD
INDIANA DUNES NATIONAL LAKESHORE
PORTER, INDIANA

DRAWING NO. 626 138616
PMIS/PKG NO. 20940
SHEET 20 OF 24



1 / A20 EXISTING ROOF PLAN
1/2" = 1'-0"

PROJECT NORTH

2 0 2 4
SCALE OF FEET

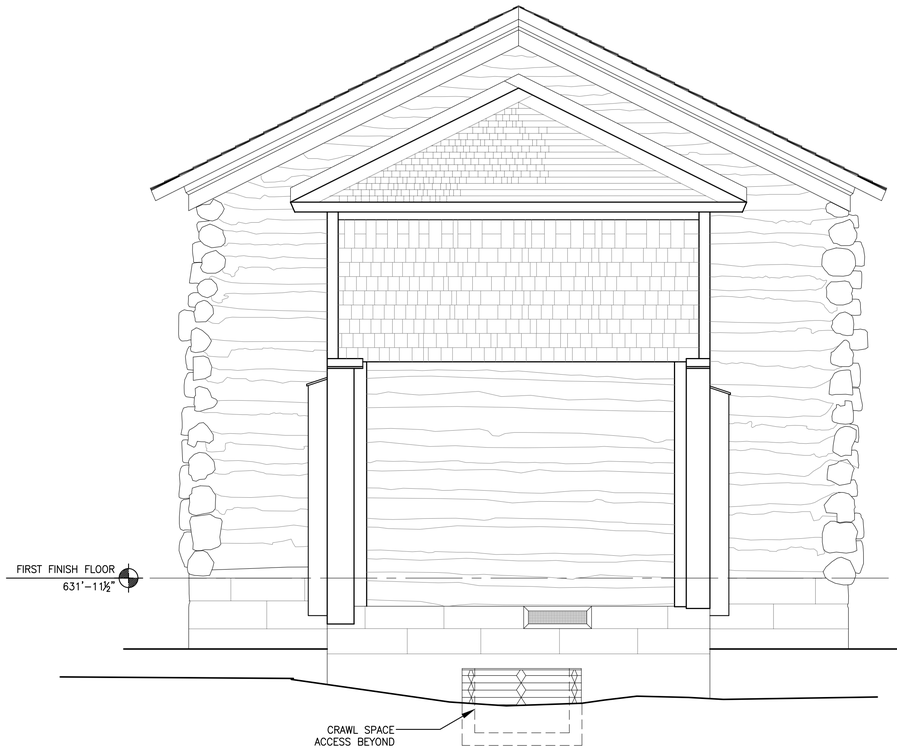
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SUB SHEET NO. A20

TITLE OF SHEET
EXISTING CONDITION DRAWINGS
HS-22
CHAPEL
BAILLY HOMESTEAD
INDIANA DUNES NATIONAL LAKESHORE
PORTER, INDIANA

DRAWING NO. 626 138616
PMIS/PKG NO. 20940
SHEET 21 OF 24



1 A21 EXISTING EAST ELEVATION
1/2" = 1'-0"



2 A21 EXISTING NORTH ELEVATION
1/2" = 1'-0"

KEY	
#	DRAWING KEY NOTES
000	WINDOW NUMBER
000 0	DOOR NUMBER
000	ROOM NUMBER

2 0 2 4
SCALE OF FEET

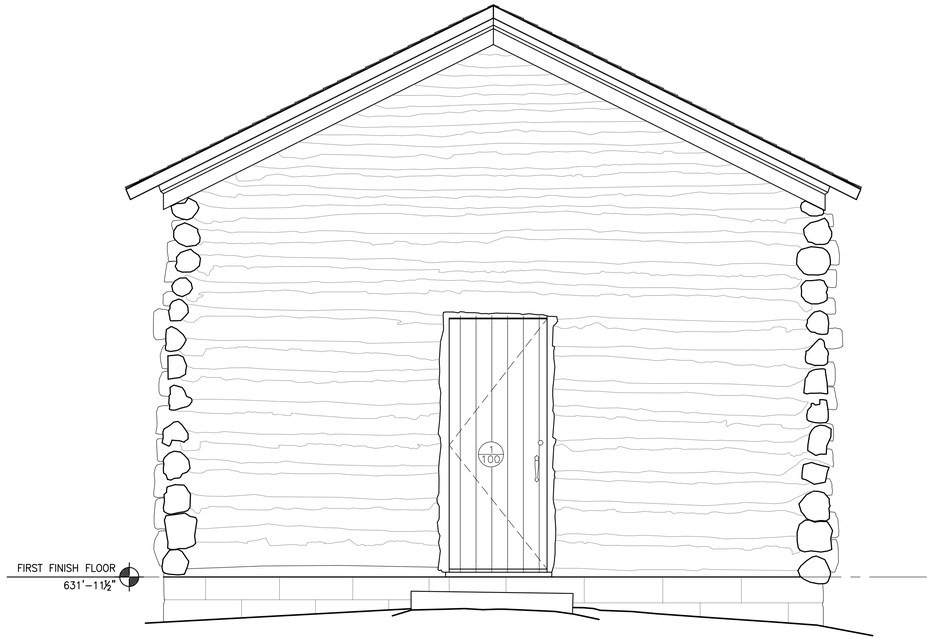
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SUB SHEET NO. A21

TITLE OF SHEET
EXISTING CONDITION DRAWINGS
HS-22
CHAPEL
BAILLY HOMESTEAD
INDIANA DUNES NATIONAL LAKESHORE
PORTER, INDIANA

DRAWING NO. 626 138616
PMIS/PKG NO. 20940
SHEET 22 OF 24



1 A22 EXISTING WEST ELEVATION
1/2" = 1'-0"



2 A22 EXISTING SOUTH ELEVATION
1/2" = 1'-0"

KEY	
#	DRAWING KEY NOTES
000	WINDOW NUMBER
000 / 0	DOOR NUMBER
000	ROOM NUMBER

2 0 2 4
SCALE OF FEET

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SUB SHEET NO. A22

TITLE OF SHEET
EXISTING CONDITION DRAWINGS
HS-22
CHAPEL
BAILLY HOMESTEAD
INDIANA DUNES NATIONAL LAKESHORE
PORTER, INDIANA

DRAWING NO. 626 / 138616
PMIS/PKG NO. 20940
SHEET 23 OF 24



1 A23 EXISTING BUILDING SECTION
1/2" = 1'-0"

KEY	
#	DRAWING KEY NOTES
000	WINDOW NUMBER
000 / 0	DOOR NUMBER
000	ROOM NUMBER

2 0 2 4
SCALE OF FEET

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SUB SHEET NO. A23

TITLE OF SHEET
EXISTING CONDITION DRAWINGS
HS-22
CHAPEL
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PORTER, INDIANA

DRAWING NO. 626 / 138616
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SHEET 24 OF 24